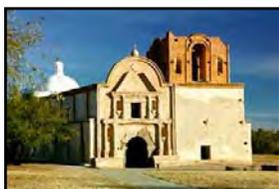




Feasibility Study for the
SANTA CRUZ VALLEY
NATIONAL HERITAGE AREA



FINAL

*Prepared by the
Center for Desert Archaeology
April 2005*

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PREFACE

The proposed Santa Cruz Valley National Heritage Area is a big land filled with small details. One's first impression may be of size and distance – broad valleys rimmed by mountain ranges, with a huge sky arching over all. However, a closer look reveals that, beneath the broad brush strokes, this is a land of astonishing variety. For example, it is comprised of several kinds of desert, year-round flowing streams, and sky island mountain ranges. Even Tucson, with its late twentieth century urban sprawl, is much more than a lot of suburbs in search of a city. Our natural history is examined first.

There is the Upper Sonoran Desert, with its many varieties of cactus – tree-like chollas, barrel cactus, low-lying hedgehogs and pincushions, green and purple prickly pears, and, of course, the towering, columnar saguaros; there are desert grasslands, and 90 miles of year-round flowing desert streams; there are oak woodlands, and pine-covered mountain ranges that are often snowy in the wintertime.

Each area, of course, has its year-round and seasonal birds and animals. There are spadefoot toads who live most of the year underground, and only come out to mate (and sing about it) during the summer rains. There are migratory birds to give joy to the birdwatcher. There are the coyotes, javalinas, deer and mountain lions who live here all year, and the occasional jaguar visiting from south of the border. And there are the venerable human institutions, such as Coronado National Forest, Tumacácori and Saguaro national parks, Tohono Chul Park, and the Arizona-Sonora Desert Museum, whose job it is to interpret our natural history for resident and visitor alike.

This is also a land of persistence and continuity. People have been growing crops in the Santa Cruz Valley for about 4,000 years. Many of the crops that developed here – including specialized varieties of corn, beans, and squash – are still grown in the region. When Father Eusebio Francisco Kino, S. J., arrived here in the 1690s, bringing European culture with him, he met folks who called themselves O'odham – the People. There are still O'odham here, speaking their own language, following their own cultural traditions. However, the language and culture Father Kino brought with him are also still important in the region. One can visit four eighteenth century Spanish missions – three administered and interpreted by the National Park Service, and one a functioning Catholic church to this day, serving the native village for which it was built. This last church, mission San Xavier del Bac, is perhaps the most complete eighteenth century Spanish Colonial baroque church in the continental United States. With few exceptions, everything that was in the church at the time of its dedication in 1798 is still there.

There are other living traces of our Spanish Colonial period. When Father Kino came into this country, he brought with him beef cattle and wheat seeds. It is no accident that wheat flour tortillas and beef (and, of course, cheese) comprise a vital part of the local native and Mexican diet, and dominate the menus of local Mexican restaurants.

Families whose ancestors first came here in 1776, to form Spanish military garrisons still live here, as do some of the native families who watched them arrive. Both of their languages are still spoken here, as is the Yoeme (also known as Yaqui) language, brought here from Sonora

in the eighteenth and nineteenth centuries. There are four Yoeme communities in and near Tucson that preserve an annual seventeenth century passion play to which visitors are welcomed.

Many of the occupations that were brought by the early Spanish settlers are still important in the region. Tucson was founded as a military presidio or garrison; the remains of an earlier such outpost may be seen at nearby Tubac Presidio State Historic Park. Old Fort Lowell in Tucson reminds of the nineteenth century and the Apache Wars, while the Titan Missile Silo in Sahuarita and the remarkable collection of older military airplanes at the Pima Air and Space Museum and the “boneyard” at Davis-Monthan Air Force Base bring us into the twentieth century.

Father Kino brought the first cattle into the area in the 1690s, and cattle raising is still important here. Much of the Santa Cruz Valley is still ranching country, and the Empire Ranch at the eastern border of the area does an excellent job of interpreting traditional cattle ranching for visitors. A stroll through one of our rural cemeteries will reveal crosses and other monuments made of horseshoes, which make the clear statement: “a cowboy is buried here.”

Mining of precious metals has been important in the area for as long as Europeans have been here, and here, too, are traces of older and more recent activity. The area’s several ghost towns, along with the towering waste dumps of modern mines that form the western edge of the Santa Cruz Valley, stand as witness to our never-ceasing search for minerals. Start asking any long-term resident about local lost mines and buried treasures, and you may well hear some of the great stories that have flourished here for well over 100 years. However, the stories themselves are the real treasure – in most cases, the gold simply is not there, and digging for it on either private or public land is strictly discouraged.

So this is the region covered by the proposed Santa Cruz Valley National Heritage Area. It is important to remember that many of the same characteristics exist on the Mexican side of the border. The most important characteristics of the area may be seen as diversity and persistence...with the addition of subtlety. There is so much more here than immediately meets the eye, that coordinated interpretation efforts are vital to imparting an understanding of our country. And with understanding can come the kind of respect and love of the land, its traditions, and its occupants, that we who propose this designation share.

Jim Griffith, December 2004

Jim Griffith received a Ph.D. in cultural anthropology and art history from the University of Arizona in 1973. Between 1979 and 1998, he ran the University’s Southwest Folklore Center. With his wife, Loma, he started the annual Tucson Meet Yourself folklife festival. Since 1985, he has written and hosted “Southern Arizona Traditions,” a weekly 3-minute spot on KUAT-TV’s Arizona Illustrated program. He has curated 11 exhibitions of regional traditional arts. Griffith has written six books: Southern Arizona Folk Arts, (UA Press, 1988), Beliefs and Holy Places (UA Press, 1991), A Shared Space, (Utah State University Press, 1995), Hecho A Mano: The Traditional Arts of Tucson’s Mexican-American Community (UA Press, 2000), Saints of the Southwest, (Rio Nuevo Press, 2000), and Folk Saints of the Borderlands: Victims, Bandits, and Healers (Rio Nuevo Press, 2003). He also collected the songs and wrote the notes for the CD Heroes and Horses: Corridos of the Arizona-Sonora Borderlands, (Smithsonian Folkways, 2002). Griffith is currently a Research Associate at the University of Arizona’s Southwest Center.

Feasibility Study for the SANTA CRUZ VALLEY NATIONAL HERITAGE AREA

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Chapter 1

INTRODUCTION AND BACKGROUND

The Santa Cruz Valley is a unique and diverse watershed in the southwestern United States that encompasses a mosaic of cultures and history. Living together in this region are a Native American tribe with roots back to prehistoric times, the descendants of Spanish ancestors who colonized the valley in the late 1600s, Mexican families who settled the area before the 1854 Gadsden Purchase made it part of the United States, and current generations of late nineteenth century American pioneers who ventured into this borderland seeking new beginnings. The abundance of well-preserved historic and archaeological resources associated with this rich multicultural history—in conjunction with spectacular natural, scenic, and outdoor recreational resources—make this region well-suited for designation as a National Heritage Area.

WHAT IS A NATIONAL HERITAGE AREA?

National Heritage Area is a new federal designation that recognizes the defining landscapes and regional cultural traditions of the United States, and helps preserve nationally important resources through the creation of partnerships among federal, state, and local entities.

A National Heritage Area is a place designated by the United States Congress where natural, cultural, historic and recreational resources combine to form cohesive, nationally distinctive landscapes arising from patterns of past and present human activities shaped by geography. These patterns make the regions representative of the national experience through the physical features that remain and the cultural traditions that have evolved in the areas (National Park Service 2004).

National Heritage Areas are different from national parks and other types of federal designations because federal zoning and regulations on land use are not imposed, nor is land acquired. Because a National Heritage Area is locally initiated and managed, it is a community-based conservation strategy that recognizes that the people who live in that area are uniquely qualified to preserve its resources.

Local entities representing multiple stakeholders manage National Heritage Areas, with planning and interpretation assistance and expertise from the National Park Service. Through annual Congressional appropriations administered by local national park unit partners, up to \$10 million in 50-percent match funding is available to each National Heritage Area over a period of 15 years. This seed money helps cover basic expenses such as staffing, and also leverages money from state, local, and private sources to implement locally selected projects.

A broad spectrum of local stakeholders seeks the designation of a Santa Cruz Valley National Heritage Area based on the resulting long-term benefits to the region. Through voluntary participation and local management, and without affecting property rights, some major benefits to residents, visitors, and existing national park units will include the following.



National Heritage Areas are a relatively new kind of national designation that seeks to preserve and celebrate America's defining landscapes and diverse cultural traditions, and to stimulate economic growth in designated regions.

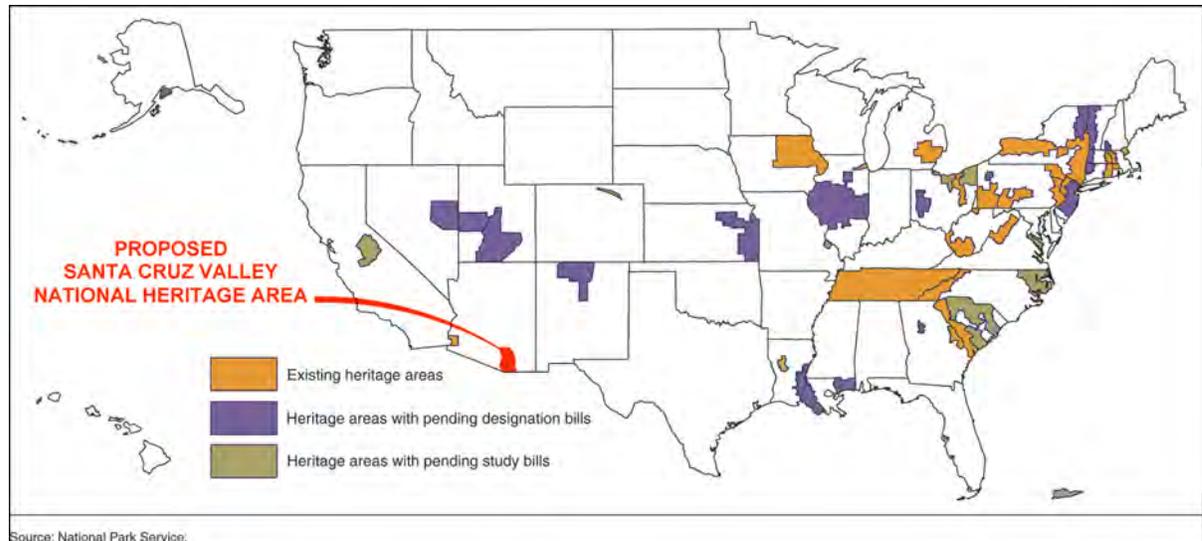
Major Benefits of a National Heritage Area Designation

- ◆ More funding and other assistance for voluntary preservation of heritage, nature, open-space, and outdoor recreational resources
- ◆ Expanded opportunities to protect and interpret resources over a larger landscape
- ◆ New sources of support for education about local cultural traditions and environments
- ◆ Stimulation of public and private partnerships for preservation and related investment opportunities
- ◆ Increased heritage tourism and nature tourism, and the resulting economic boost to the region
- ◆ Job creation in tourism, preservation, restoration, and education

An introduction to the nationally distinctive Santa Cruz Valley is provided in the rest of this section. The history of, and breadth of support for, the local effort to obtain a National Heritage Area designation for this region is also summarized. The section concludes with a description of the planning and preparation of this Feasibility Study.

THE SANTA CRUZ VALLEY: A UNIQUE NATURAL REGION AND MIX OF CULTURES

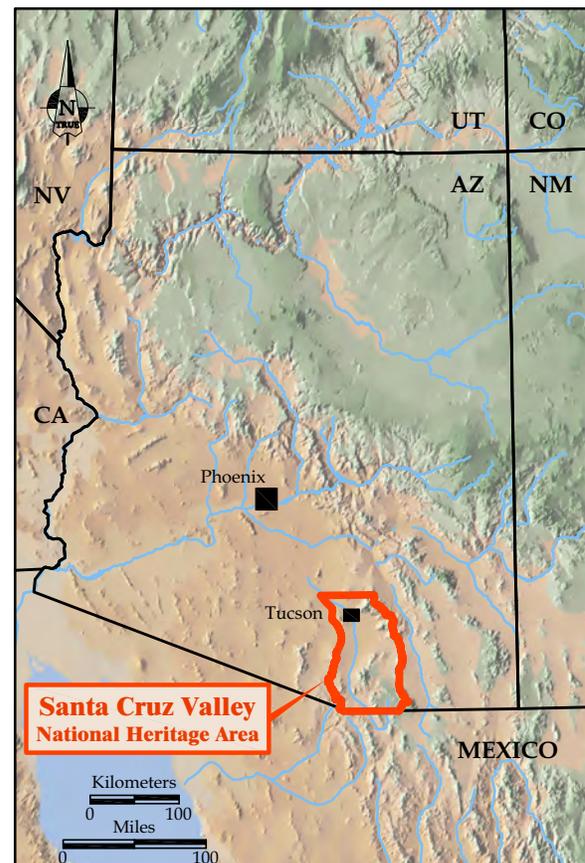
The landscape of the Santa Cruz Valley, stretching across southern Arizona into northern Mexico, ranges from cactus-covered slopes to open grasslands, rugged canyons, forested mountain ranges over 9,000 ft in elevation, and lush oases created by rare desert streams. The valley is named after the Santa Cruz River, which rises in the grassland of the San Rafael Valley, flows southward into northern Mexico, loops northward back into Arizona, and eventually sinks into the desert north of Tucson. While the flow of the Santa Cruz River has



diminished in modern times, some 90 miles of watercourses with year-round flow in the main river channel and its tributaries remain.

The varied landscape within the middle and upper watershed of the river – encompassing more than 3,000 mi² in Santa Cruz County and eastern Pima County – has many distinct life zones that host an uncommon diversity of plant and animal life. These include tropical species at the northern end of their ranges, unique desert species, and mountaintop survivors from the last glacial period. The valley is particularly well known for its variety of birds, butterflies, lizards, and other watchable wildlife, and it is an important bird migration corridor, with many popular bird-watching spots. The Santa Cruz Valley is one of the few places in the United States where the stately saguaro cactus grows, and it is one of the last North American refuges for the Mexican gray wolf and the jaguar.

This is one of America's longest-inhabited regions, with traces of human occupation extending back more than 12,000 years, and remains of continuous farming and settlement over the last 4,000 years. A series of prehistoric cultures flourished in this valley. The people who live here today represent several cultures, both native and immigrant, who maintain distinctive identities but also influence each other and create a unique mix of cultures. It is the homeland of the Tohono O'odham (the Desert People), a Native American tribe who has



lived here since very ancient times. It is also the adopted home of the Yaqui Indians, who fled early twentieth century warfare in western Mexico. Descendents of Spanish and Mexican settlers of the eighteenth and early nineteenth centuries still live in the region, and Mexican culture and traditions strongly connect both sides of the border. Americans have also called this place home since they began arriving 150 years ago, bringing their own cultural traditions from the eastern United States and from many other parts of the world.

Signs of a rich and unique cultural heritage are everywhere. A chain of well-preserved historic missions, presidio fortresses, and ranches throughout the Santa Cruz Valley are evidence of the legacy of Spanish exploration, mission-building, and colonization that began in the late 1600s. Streets lined with Sonoran-style adobe houses recall when this region was part of Mexico after it won independence from Spain in 1821. Ghost towns, old mines, and Territorial-style ranch houses are visible reminders of a series of gold and silver rushes and the rise of a cattle industry after the region became part of the United States in 1854, and when, in 1880, it became linked with the rest of the nation by railroad. Several inner-city neighborhoods and rural communities are characterized by Territorial-style architecture from the period before Arizona achieved statehood in 1912.

Today, Pima and Santa Cruz counties, the cities of Tucson, Nogales, Marana, Oro Valley, and Sahuarita, and many unincorporated communities are actively preserving and restoring their architectural heritages. They are also celebrating the deep and diverse cultural traditions of the region with many nature and heritage museums, parks, and annual festivals. A number of historic rural communities still thrive, and cattle ranches, cotton farms, pecan orchards, vineyards, and copper mines continue to make the valley a working landscape. Extensive open spaces and a wide range of wildlife habitats are conserved in parks, natural preserves, and public lands. Both residents and visitors enjoy exploring parks, public lands, trails, museums, and cultural festivals to experience and learn about the rich natural and cultural history of the Santa Cruz Valley.

A TWO-YEAR GRASS-ROOTS EFFORT

The local, grass-roots effort seeking a National Heritage Area designation has taken shape over the last two years. Beginning in the spring of 2003, Center for Desert Archaeology staff began to plan and organize the effort. An informal working group, with approximately 50 participants representing a wide cross section of stakeholders, has met monthly since April 2003, to monitor and plan progress. Members of this working group are listed in Appendix C of this study. The designation effort has been managed by the Center for Desert Archaeology, a nonprofit, 501(c)(3) corporation in Tucson. The basic tasks involved in this effort have included:

- ◆ conceptualization,
- ◆ coalition building,
- ◆ obtaining local political support,
- ◆ conducting public outreach,
- ◆ fundraising,
- ◆ preparing this Feasibility Study, and
- ◆ coordination with legislation sponsors.



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This Feasibility Study identifies the significant nature and heritage resources in the region, and the themes that link them.



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COALITION BUILDING

After the basic concept of the Santa Cruz Valley National Heritage Area was developed (see Chapter 2, "Proposed Concept"), the next task was to build a broad coalition of local leaders and stakeholder groups that support the concept. A range of key local leaders, organizations, agencies, and interest groups were identified. Center for Desert Archaeology staff and members of the working group met with individual leaders and the leaders or staffs of local groups, and asked for agenda space during upcoming board and membership meetings. These presentations included explanations about what a National Heritage Area is, as well as discussions about the potentials of a National Heritage Area for achieving common goals and bringing long-term benefits to the region. As appropriate, individuals, group leaders, boards of directors, or memberships were shown the growing and diverse list of supporters, and they were invited to join the coalition. In most cases, these individuals or groups were asked to formalize their support with resolutions or with letters of support. To date, letters of support have been received from a large number of local stakeholder groups and organizations involved in tourism promotion, regional economic development, historic preservation, nature conservation, and environmental education.

Presentations to Local Leaders and Stakeholder Groups

- ◆ INAH Sonora Director, Hermosillo, Mexico, 22-23 April 2003
- ◆ Santa Cruz County Rotary Clubs, 9 May 2003

- ◆ Nogales Rotary Club, 29 May 2003
- ◆ Pimería Alta Historical Society, 29 May 2003
- ◆ Community Foundation of Southern Arizona, 5 June 2003
- ◆ Tucson-Pima County Historical Commission, 11 June 2003
- ◆ Arizona Archaeological Council, 20 September 2003
- ◆ Natural and Cultural Heritage Alliance of Pima County, 22 September 2003
- ◆ Arizona Archaeological and Historical Society, 8 October 2003
- ◆ Arizona Open Land Trust, 9 October 2003
- ◆ St. Phillips Academics, 17 October 2003
- ◆ Metropolitan Tucson Convention and Visitors Bureau, 11 February 2004
- ◆ Preservation Studies Program, University of Arizona, 13 February 2004
- ◆ Marana Rotary Club, February 2004
- ◆ The Nature Conservancy, Arizona, 10 March 2004
- ◆ Senior Leadership Program, 23 March 2004
- ◆ State Historic Preservation Office, 24 March 2004
- ◆ Nogales-Santa Cruz Chamber of Commerce, 25 March 2004
- ◆ Sonoran Institute, 9 April 2004
- ◆ Sonoran Joint Venture Program, 16 April 2004
- ◆ Borderlands Institute, 27 April 2004
- ◆ Santa Cruz Tourism Council, 26 May 2004
- ◆ Menlo Park Neighborhood Association, 8 June 2004
- ◆ Anza Trail Coalition of Arizona, 16 June 2004
- ◆ Town of Marana Administrative Staff, 22 June 2004
- ◆ Pima County Administrative Staff, 30 June 2004
- ◆ Rotary Club of Tucson, 28 July 2004
- ◆ Arizona Statewide Historic Preservation Conference, 31 July 2004
- ◆ Tubac-Amado Chapter of the Santa Cruz County Cowbells, 3 August 2004
- ◆ Tucson Airport Authority, 3 August 2004
- ◆ Southern Arizona Home Builders Association, 6 August 2004
- ◆ Sonoita Valley Planning Group, 7 August 2004
- ◆ Bureau of Land Management, Tucson Sector staff, 17 August 2004
- ◆ City of Tucson Planning Department staff, 1 September 2004
- ◆ Arizona Planning Association, 23 September 2004
- ◆ Green Valley Chamber of Commerce, Executive Director, 12 October 2004
- ◆ Coronado National Forest Leadership Team, 22 March 2005

Letters of Support from Local Business and Tourism Organizations

- ◆ Metropolitan Tucson Convention and Visitors Bureau
- ◆ Nogales-Santa Cruz County Chamber of Commerce
- ◆ Patagonia Area Business Association
- ◆ Santa Cruz Tourism Council
- ◆ Southern Arizona Homebuilders Association
- ◆ Tubac Chamber of Commerce
- ◆ Tucson Airport Authority
- ◆ Tucson Hispanic Chamber of Commerce
- ◆ Tucson Metropolitan Chamber of Commerce

Letters of Support from Organizations and Nonprofits Involved in Historic Preservation, Nature Conservation, and Environmental Education

- ◆ Anza Trail Coalition of Arizona
- ◆ Arizona Archaeological and Historical Society
- ◆ Arizona Archaeological Council
- ◆ Arizona Historical Society
- ◆ Arizona-Sonora Desert Museum
- ◆ Arizona State Museum
- ◆ Center for Desert Archaeology
- ◆ Empire Ranch Foundation
- ◆ Friends of the Santa Cruz River
- ◆ Menlo Park Neighborhood Association
- ◆ Pimería Alta Historical Society
- ◆ Santa Cruz River Alliance
- ◆ The Nature Conservancy in Arizona
- ◆ Tubac Arts Council
- ◆ Tubac Historical Society
- ◆ Tucson Audubon Society
- ◆ Tucson-Pima County Historical Commission
- ◆ Tucson Presidio Trust for Historic Preservation
- ◆ University of Arizona Preservation Studies Program
- ◆ University of Arizona Southwest Center
- ◆ WestWordVision, Patagonia

Letters of Support from Ranch and Farm Businesses

- ◆ J. Anthony Sedgwick, Santa Fe Ranch, Santa Cruz County
- ◆ David Parsons, Lazy RR Ranch, Santa Cruz County
- ◆ Mac Donaldson, Empire Ranch, Pima County
- ◆ Dick and Nan Walden, Farmers Investment Company, Pima County

Obtaining Local Political Support

Gaining formal support from local governments and tribes, as well as from local state and federal land managers, has been critical to the progress of the designation effort. The initial step was development of a large color map showing the proposed boundaries of the National Heritage Area. This allowed officials to see how their respective jurisdictions fall within the boundaries, and what other jurisdictions are included.

Formal resolutions or letters of support were requested from all local governments, tribes, and federal and state parks and lands within the proposed boundaries. Letters of support were also requested from certain state officials, including the Governor of Arizona. To date, resolutions and letters of support have been received from every local government and tribe within the proposed National Heritage Area, as well as from every federal and state agency or official that was asked.

Presentations to Local Governments, Tribes, and State Officials

- ◆ Chairman of Santa Cruz County Board of Supervisors, 25 April 2003
- ◆ Basin Managers (land managers of state and federal agencies), 21 May 2003
- ◆ Mayor of Nogales, 27 May 2003
- ◆ Santa Cruz County Board of Supervisors, 27 May 2003
- ◆ Nogales City Council, 4 June 2003
- ◆ San Xavier District Council, 1 July 2003
- ◆ Town of Marana staff, 14 August 2003
- ◆ Town of Oro Valley staff, 19 August 2003
- ◆ Marana Town Council, 21 October 2003
- ◆ Jan Leshner, Aide to Governor Napolitano, 3 November 2003
- ◆ Pima Association of Governments, 7 November 2003
- ◆ Pascua Yaqui Tribe staff, 2 December 2003
- ◆ Arizona Office of Tourism, 12 April 2004
- ◆ Jean Emery, Arizona State Parks and Pima Air and Space Museum, 28 April 2004
- ◆ Pima County staff, 30 June 2004
- ◆ Marana Town Council, 20 July 2004
- ◆ San Xavier District Council, 13 September 2004
- ◆ City of South Tucson, City Manager, 5 October 2004
- ◆ Pascua Yaqui Tribe staff, 5 October 2004
- ◆ Pascua Yaqui Tribal Council, 12 January 2005
- ◆ Santa Cruz County Board of Supervisors, 23 February 2005

Resolutions of Support from Local Governments

- ◆ Pima County Board of Supervisors, Resolution No. 2003-88, 13 May 2003
- ◆ Santa Cruz County Board of Supervisors, Resolution No. 2003-18, 27 May 2003
- ◆ City of Nogales, Resolution No. R2003-05-007, 4 June 2003
- ◆ Town of Sahuarita, Resolution No. 2003-57, 8 September 2003
- ◆ Town of Oro Valley, Resolution No. (R)03-81, 17 September 2003
- ◆ Town of Marana, 27 October 2003
- ◆ Town of Patagonia, Resolution No. 03-21, 12 November 2003
- ◆ City of Tucson, Resolution No. 19726, 24 November 2003
- ◆ Pima Association of Governments Regional Council, 17 December 2003
- ◆ City of South Tucson, Resolution No. 04-39, 18 October 2004

Resolutions and Letters of Support from Local Tribes

- ◆ Dallas Massey, Tribal Chairman, White Mountain Apache Tribe, 10 August 2004
- ◆ San Xavier District Council, Tohono O'odham Nation, 21 September 2004
- ◆ Vivian Juan-Saunders, Chairwoman, Tohono O'odham Nation, 30 November 2004
- ◆ Herminia Frias, Chairwoman, Pascua Yaqui Tribe, 2 February 2005

Letters of Support from Local Federal and State Land Managers

- ◆ Ann Rasor, Superintendent, Tumacácori National Historical Park, 13 May 2003
- ◆ Joe Martinez, Acting Manager, Tubac Presidio State Historic Park, 22 May 2003
- ◆ Neil Donkersley, Park Manager, Catalina State Park, 22 May 2003
- ◆ John McGee, Forest Supervisor, Coronado National Forest, 2 June 2003
- ◆ Sarah Craighead, Superintendent, Saguaro National Park, 24 September 2004
- ◆ Shela McFarlin, Tucson Field Manager, Bureau of Land Management, 30 September 2004

Letters of Support from State Officials

- ◆ Governor Janet Napolitano, 6 July 2004
- ◆ Margie Emmermann, Director, Arizona Office of Tourism

PUBLIC OUTREACH

Since the designation effort began, a top priority has been education of local residents and stakeholder groups about National Heritage Areas, and collecting their input on the concept of the proposed Santa Cruz Valley National Heritage Area. The first steps included development of a color brochure and a website. A run of 5,000 brochures was donated by a local printer. On its existing website, the Center for Desert Archaeology created a new section with information about the National Heritage Area concept and the designation effort. These web pages were updated as necessary, and the web address is included on the brochure and all other printed materials. E-mail and phone inquiries were answered promptly, and informational materials were mailed upon request. Information tables were set up at several popular local events. At these events, Center for Desert Archaeology staff and/or members of the working group answered questions, displayed the map of the proposed boundaries, and handed out brochures and other informational materials.

A series of town meetings were held across the region between May and September of 2004. Press releases and interviews with reporters resulted in several articles explaining the concept and potential benefits of the proposed National Heritage Area, and several editorial columns came out in support of it.

Town Meetings

- ◆ Nogales, 26 May 2004
- ◆ Patagonia, 30 June 2004
- ◆ Tucson, 7 July 2004
- ◆ Tucson, 21 July 2004
- ◆ Oro Valley, 25 August 2004
- ◆ Marana, 1 September 2004

*Public input
has been
obtained
for this
Feasibility
Study.*



Information Tables at Local Events

- ◆ Anza Days, Tubac State Park, 18-19 October 2003
- ◆ Arizona Archaeology Awareness Month Fair, Tempe, 20-21 March 2004
- ◆ Cienega Pioneer Day, Colossal Cave Mountain Park, 27 March 2004
- ◆ Tumacácori Information Exchange, 7 April 2004
- ◆ Governor's Tourism Conference, Tucson, 7-9 July 2004
- ◆ Empire Ranch Roundup, 11 September 2004
- ◆ Fiesta Sahuarita, 18 September 2004
- ◆ Fiesta Tumacácori, 4-5 December 2004

Articles in Local Newspapers

- ◆ Nonprofit Seeks Heritage Area, *Arizona Daily Star*, 13 October 2003
- ◆ Connecting the Dots, *Arizona Daily Star*, 14 October 2003
- ◆ Supporters Working to Create Vast National Heritage Area for Watershed, *Green Valley News & Sun*, 9 January 2004
- ◆ National Heritage Area Explanation, *Nogales International*, 25 May 2004
- ◆ National Heritage Area Would Benefit Everyone, *Nogales International*, 22 June 2004
- ◆ Town Seeking Input from Citizens for a National Heritage Area, *The Bulletin*, 23 June 2004

- ◆ Heritage Could be Tourism Draw, *Arizona Daily Star, Northwest Edition*, 12 August 2004
- ◆ Santa Cruz: Stories in a Sandy Riverbed, *Arizona Daily Star, Northwest Edition*, 19 August 2004
- ◆ Q & A (with Jonathan Mabry), *Tucson Citizen*, 14 September 2004
- ◆ Make Valley a Heritage Area? *Tucson Citizen*, 26 October 2004
- ◆ Sups Support Heritage Tourism, *Nogales International*, 7 March 2005

LOCAL FUNDRAISING

Necessary funding for the designation effort was sought from local governments, business organizations, state agencies, businesses, and civic leaders. A special fund was established by the Center for Desert Archaeology, a nonprofit 501(c)(3) corporation that has managed the fundraising and accounting. A detailed budget covering all tasks was developed for the designation effort. Appropriate potential donors were identified for specific budget categories. One of the fundraising goals was to obtain donations from a broad spectrum of public and private sources, thereby demonstrating the breadth of local support. Each formal request for a donation showed how the money would be spent and how it would be matched by other donors. To date, contributions have been received from several local governments, local and state tourism agencies, several private resorts, and a number of individuals convinced that a National Heritage Area will be good for communities in the region, will boost the local economy, and will improve the quality of life for residents.

Major Contributions (≥\$1,000) for Designation Effort

Arizona Office of Tourism	\$10,000
Pima County	10,000
Santa Cruz County	10,000
Metropolitan Tucson Convention and Visitors Bureau	9,000
City of Tucson	5,000
Town of Oro Valley	5,000
Town of Marana	5,000
City of Nogales	5,000
Tucson-Pima County Historical Commission	3,000
Tubac Golf Resort	1,000
Esplendor Resort at Rio Rico	1,000

Contact with Legislators

Since its inception, the designation effort has involved communication with federal legislators who represent this region. Meetings, phone calls, letters, and e-mails with legislators or their staffs have kept them informed about the development of the concept and the growing local support. Congressman Raul Grijalva declared his support from the beginning of the effort.

The chairs of the Boards of Supervisors of Pima County and Santa Cruz County wrote formal letters asking Senator John McCain, Senator Jon Kyl, Congressman Jim Kolbe, and Congressman Raul Grijalva to sponsor designation bills in the Senate and in the House of Representatives. Contact and coordination with the bill sponsors will continue during the legislative process.

- ◆ Meeting with Congressman Raul Grijalva, 15 April 2003; letter and copy of draft feasibility study, 2 November 2004
- ◆ Phone calls and/or e-mails with Rebecca Jenson, Aide to Congressman Jim Kolbe, 2 October 2003 and 10 August; letter and copy of draft feasibility study, 1 November 2004
- ◆ Letters to Congressman Grijalva, Congressman Kolbe, Senator McCain, and Senator Kyl from the chairs of the Pima County and Santa Cruz County Boards of Supervisors, 27 October 2003
- ◆ Phone calls and/or e-mails with Rachel Kondor, Aide to Congressman Grijalva, 16 September, 1 October, 22 January 2003; 1 November 2004
- ◆ Letter to Senator McCain, 14 June 2004
- ◆ Meeting with Gloria Stevens, Aide to Senator McCain, Tucson Office, 15 June 2004; letter and copy of draft feasibility study, 1 November 2004
- ◆ Meeting with Nick Matiella, Aide to Senator McCain, Phoenix Office, 29 July 2004; letter 9 August 2004; letter and copy of draft feasibility study, 1 November 2004
- ◆ Meeting with Tiana Smith, Constituent Service Representative for Senator Kyl, 21 September 2004; letter and copy of draft feasibility study, 1 November 2004
- ◆ Letter to Senator Kyl, 24 September 2004.
- ◆ Meetings in Washington, D.C. with Congressman Grijalva and staffs of Congressman Kolbe and Senators McCain and Kyl, 1 March 2005

LOCAL ENTITIES INVOLVED IN THE DESIGNATION EFFORT

Four different entities have been involved with the local effort seeking a National Heritage Area designation for the Santa Cruz Valley.

The Center for Desert Archaeology has managed the designation effort, with input from the volunteer members of the Santa Cruz Valley National Heritage Area Working Group. A new nonprofit corporation, the Santa Cruz Valley Heritage Alliance, Inc., was recently created as the first step in developing a local entity that will: (1) manage the designation effort after the completion of this Feasibility Study; (2) prepare the Management Plan after designation; and (3) manage the National Heritage Area after approval of the Management Plan. The Alliance has elected interim board members and officers and has adopted interim bylaws. An expanded

board of directors and permanent bylaws will be developed following designation (see Chapter 2).

Through the entire designation effort, Tumacácori National Historical Park has served as the National Park Service partner and advisor. Those roles will continue after designation. The roles of these various entities in the designation effort are summarized below.

Santa Cruz Valley National Heritage Area Working Group

- ◆ Has met monthly since April 2003, to share information regarding progress on the Feasibility Study; most meetings have been at Tubac Presidio State Historic Park, which serves as a midpoint between group members who come from both Pima and Santa Cruz counties
- ◆ Informal group open to all interested parties
- ◆ Number of participants: 10 to 25 at individual meetings; consists of some 50 persons in aggregate over time (see Appendix D)
- ◆ Many participants will likely be integrated in some fashion into the identified management entity (the Santa Cruz Valley Heritage Alliance, Inc.; see below) as board members, members of the Partnership Council, volunteers, and so forth

Center for Desert Archaeology

- ◆ Arizona nonprofit corporation founded in 1989; the Center received its 501(c)(3) tax-exempt letter from the Internal Revenue Service in 1991
- ◆ Served as coordinator and financial administrator of the effort to develop this Feasibility Study
- ◆ Obtained funds for preparation of the Feasibility Study, supporting materials, and public outreach from individuals, municipalities, counties, corporations, the Tucson-Pima County Historical Commission, the Metropolitan Tucson Convention and Visitors Bureau, and the Arizona Office of Tourism
- ◆ To obtain necessary technical input for the Feasibility Study, the Center subcontracted with several individuals or groups who prepared sections of the Feasibility Study
- ◆ Works throughout the Greater Southwest to conduct community-based, preservation archaeology; Heritage Areas are a mechanism to facilitate the goals of the Center
- ◆ The Center will relegate coordination and financial management roles to the Santa Cruz Valley Heritage Alliance, Inc., upon completion of this Feasibility Study
- ◆ The Center may participate as a member of the Partnership Council in the future

- ◆ The Center is likely to contribute information to the National Heritage Area and work as a partner

Santa Cruz Valley Heritage Alliance, Inc.

- ◆ Created to fulfill requirement in pending legislation (“National Heritage Partnership Act”) for identification of entity that will prepare a Management Plan after designation
- ◆ Incorporated as an Arizona private nonprofit in July 2004
- ◆ Purpose of incorporation is to begin building an institution that can serve as the local managing entity of the Santa Cruz Valley National Heritage Area after designation
- ◆ Currently governed by a 24-person board
- ◆ Has adopted bylaws
- ◆ Has no paid staff or subcontracts
- ◆ Has submitted application for tax-exempt status with the Internal Revenue Service
- ◆ New board members will be named in accordance with the specific formula identified in Chapter 6, “Plan for Management Entity”
- ◆ The Alliance will prepare the Management Plan, develop a Cooperative Agreement with the National Park Service, and will manage the National Heritage Area (see Chapters 2 and 6)

Tumacácori National Historical Park

- ◆ Created through executive order by Theodore Roosevelt in 1908, as Tumacácori National Monument (9 acres); boundary changes in 1958 and 1978 enlarged the park to 15 acres; expanded by Congress into a National Historical Park including Guevavi (8 acres) and Calabazas (21 acres) in 1990; expanded by Congress to a total of 355 acres in 2004
- ◆ Serves as required National Park Service partner in development of Feasibility Study and Management Plan
- ◆ Will provide comments and input to National Park Service testimony on the Feasibility Study and the Management Plan
- ◆ Will have additional roles in the management of the National Heritage Area after designation (see Chapter 2)

PREPARATION OF THIS FEASIBILITY STUDY

The National Heritage Partnership Act that is currently working its way through the legislative process will, among other things, standardize the criteria for National Heritage Area designations and also requirements for feasibility studies. While this legislation is pending, the National Park Service has no formal guidelines for evaluating the potential of a region for National Heritage Area designation or the required contents of feasibility studies. However, most feasibility studies, whether prepared by the National Park Service or by local stakeholder groups, generally address the same central questions. These are as follows.

1. What are the nationally distinctive landscapes and stories of this region, and how are they related?
2. What significant and representative resources of these landscapes and stories are preserved?
3. What are the potentials of a National Heritage Area designation for helping preserve, enhance, and interpret these resources?
4. How will the majority of the region's stakeholders benefit from a National Heritage Area designation?
5. How broad is local support for a National Heritage Area designation?

This Feasibility Study fully addresses all of these questions. The "Proposed Concept" of the Santa Cruz Valley National Heritage Area is presented in the next chapter, followed by an inventory of the "Supporting Resources" within the proposed boundaries. The "Interpretive Themes and Related Resources" that integrate the region are summarized in Chapter 4, while Chapter 5 evaluates the "Potentials for Developing Heritage and Nature Tourism." In addition



The nonprofit Center for Desert Archaeology has managed the initial designation effort. For more information, visit the Center's website: www.cdarc.org.

to these elements common to other feasibility studies, included here are descriptions of a “Plan for Management Entity” (Chapter 6) and a “Conceptual Financial Plan” (Chapter 7), which are required components in the pending National Heritage Partnership Act. The National Park Service’s currently informal eligibility requirements for National Heritage Areas are addressed in Chapter 8, an “Evaluation According to Feasibility Criteria.” A comparison of “Conceptual Alternatives” is offered in Chapter 9, weighing the relative advantages of a National Heritage Area versus other approaches. This Feasibility Study concludes with a “Vision Statement” (Chapter 10). The appendices include summaries of the most important historic properties and archaeological sites within the proposed boundaries, a list of the members of the working group that has guided this designation effort, copies of resolutions and letters of support, and a draft of the designation bill.

Chapter 2

PROPOSED CONCEPT

One of the most important tasks in building a National Heritage Area is conceptualizing it in sufficient detail. Questions that must be answered include: “What are the underlying principles?” “What are the long-term goals?” and “What are the conceptual boundaries?” Those questions are addressed in this chapter of the Feasibility Study. The purpose here is to demonstrate: (1) the concept follows the principles of National Heritage Areas; (2) its goals have logic and vision; (3) it is appropriate for a National Heritage Area designation; and (4) it serves the interests and needs of communities in the region. The rationale for the boundaries is also explained. This chapter concludes with a summary of the roles of the various entities involved in the development of this Feasibility Study and management of the National Heritage Area after its designation.

PRINCIPLES

The National Heritage Area program of the National Park Service is based on innovative differences from other types of federal land designations for the purpose of resource conservation. Rather than being top-down, mandatory, and involving land set-asides or use-restrictions, this type of designation is based on grass roots organization and voluntary preservation, and it does not involve property or land-use regulation. The concept of a Santa Cruz Valley National Heritage Area is based on the following common principles of National Heritage Areas:

- ◆ heritage education
- ◆ voluntary preservation,
- ◆ security of property rights, and
- ◆ local management.

Heritage Education

A deeper understanding and appreciation of our cultural and natural legacy can be achieved through heritage education. In addition to nurturing a sense of continuity and connection with our historical and cultural experiences in this region, heritage education instills a stronger “sense of place,” and encourages residents to consider their past in planning for the future. In a National Heritage Area, heritage education fosters a stewardship ethic that leads to community-based, voluntary resource preservation.

Voluntary Preservation

A fundamental principle of the National Heritage Area concept is that conservation efforts are most successful when the people living closest to the resources set the agenda, identify priorities, and initiate preservation actions voluntarily. Participation by private property



owners is voluntary. The primary function of a National Heritage Area is to provide assistance to communities, groups, landowners, and other stakeholders to help them achieve their goals of resource preservation, promotion, and interpretation. Priorities are identified through an active public process.

Security of Property Rights

The National Heritage Area concept recognizes the importance of private lands, and that property owners are the primary planners of land use. Designation does not affect private property rights, property taxes, land-use zoning, or the right to renovate or remove existing buildings on private property. Like other National Heritage Areas, specific language will be included in the designation bill and subsequent management plan that the Santa Cruz Valley National Heritage Area will have no regulatory authority, and it will be precluded from using federal funding to acquire real property or an interest in real property. Some important points on this issue include the following.

- ◆ National Heritage Areas are not parks and have no federal regulatory authority
- ◆ No zoning changes or changes in property taxes result from designation of a National Heritage Area

- ◆ The federal funding available to a National Heritage Area cannot be spent to acquire property
- ◆ Property owners within a National Heritage Area are not required to permit public or government access to their lands
- ◆ Property owners within National Heritage Areas are not restricted from demolishing old buildings on their properties, from selling or subdividing their properties, or from developing their properties

Local Management

The Santa Cruz Valley National Heritage Area will adhere to the National Park Service requirement that it be managed by a local entity with broad representation of the stakeholders. The primary goal of the management entity structure is equitable representation of jurisdictions, interest groups, and cultures within the National Heritage Area. The management entity proposed for the Santa Cruz Valley National Heritage Area (see Chapter 6) will have a membership evenly divided between the two counties within the proposed boundaries, and that reflects the cultural diversity of the region. Local governments and tribes, ranching, agriculture, nature conservation, historic preservation, arts, education, tourism, lodging, and other local business interests will be represented. The appointment of a representative by the State of Arizona will ensure that planning and activities are coordinated among heritage areas within the state. Representation of the neighboring state of Sonora, Mexico, will advance the goal of improved cross-border connections.

GOALS

Building upon these principles, establishment of a Santa Cruz Valley National Heritage Area will create a locally controlled framework to support the management of heritage and nature



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Local entities representing a broad spectrum of stakeholders manage National Heritage Areas.

resources, without affecting property rights. A local management entity with broad representation of the region's stakeholders will select and assist voluntary efforts to preserve, restore, and interpret the heritage and nature resources that make this region unique. Opportunities for partnerships and funding for these activities will increase. A National Heritage Area will also coordinate promotion of the region's resources for heritage tourism and nature tourism, and will provide a framework to link related resources with nationally distinctive themes.

Increased Recognition of Unique Resources

A National Heritage Area designation for the Santa Cruz Valley will increase local, national, and international recognition of its unique historic treasures, cultural traditions, scenic landscapes, diverse wildlife, and other heritage and nature resources. This increased awareness will raise the perceived value of those resources, which will, in turn, encourage voluntary preservation of the resources. In this and other ways, a National Heritage Area will promote and assist the development of community-based, voluntary preservation.

A National Heritage Area will promote the region for heritage and nature tourism, and help stakeholders preserve and enhance the resources that attract tourists.



Development of a Stronger Sense of Place

Development of a stronger regional identity and a greater sense of place for residents will be additional outcomes of a National Heritage Area designation. Living in a National Heritage Area, newcomers, schoolchildren, and even long-term residents and natives will find a stronger connection to the place they live, and will take greater pride in its distinctiveness.

Individuals, neighborhoods, and communities with a strong sense of place will work voluntarily to preserve the things that make their home special. An important priority of the National Heritage Area will be support for development of programs and materials for environmental education and heritage education for schoolchildren and for the general public.

Linking of Resources to Improve Management

There will be increased potentials within a National Heritage Area for developing interpretive, promotional, and planning linkages among the diversity of heritage resources in the region. For example, planned projects such as the partial reconstruction of the eighteenth century Spanish Colonial mission and presidio in Tucson Origins Heritage Park and the development of Marana Heritage Park to showcase the long history of agriculture and ranching in this region, will become linked to the many existing heritage resources in the Santa Cruz Valley. Nature, open-space, and outdoor recreation resources can also be linked in ways that benefit both resources and residents.

New Opportunities for Funding and Partnerships

New sources of funding for locally selected preservation projects and educational programs will become available. Designation as a National Heritage Area will make the region eligible for 50-percent match funding of up to \$1 million annually over a period of 15 years.

This federal seed money has proven to be an important catalyst for raising other funds for local projects. In addition to creating new funding opportunities, a National Heritage Area will encourage and enable effective partnerships among local stakeholders and with federal agencies for preservation, interpretation, and economic development.

Sustainable, Place-based Economic Development

Increased recognition of the heritage and nature resources in the Santa Cruz Valley will also draw more visitors to the region, and a National Heritage Area will help direct them to destinations and events seeking higher levels of visitation.

Economic development from increased heritage tourism and nature tourism will be an important benefit of a National Heritage Area designation. Because heritage tourism and nature tourism are based on resource preservation rather than resource extraction, this type of economic development is sustainable, long term, and will also benefit future generations of residents.

National Heritage Areas balance voluntary promotion and voluntary preservation.



- ◆ *Nature, heritage, open-space, and outdoor recreation resources can be promoted for tourism at a regional scale.*
- ◆ *Communities and businesses can choose whether they want to be promoted for tourism.*
- ◆ *Opportunities increase for funding of preservation and restoration projects.*
- ◆ *Assistance can be provided for resources that need special protection and/or limited visitation.*

Balanced Preservation and Promotion

While a National Heritage Area could help develop tourism facilities in locations that need them, it could also aid efforts to restore and protect sensitive places. Communities and rural areas that do not want higher numbers of visitors may choose to not be promoted. Applicants for support will be required to show broad community support to receive assistance. Some of the economic benefits of a National Heritage Area designation can be invested in minimizing tourism impacts on the very resources that attract visitors, and they can also be used to protect places with fragile resources that need limited or restricted visitation.

Better Cross-border Connections

This will be the first National Heritage Area on the United States-Mexico border, and improved cultural and economic connections between the United States and Mexico are additional opportunities provided by designation. A coordinated cross-border strategy could be developed for tourism, educational programs, interpretive signage, development of sites for heritage tourism and nature tourism, and other programs that will benefit valley residents on both sides. Increased recognition of the important resources in the Santa Cruz Valley in Sonora may eventually lead to a comparable heritage zone established by the government of Mexico or the state of Sonora.

In summary, the concept proposed in this Feasibility Study is for local stakeholders to use the National Heritage Area as a framework to:

- ◆ increase local, national, and international recognition of the unique history, cultural traditions, and natural beauty of this region;
- ◆ encourage a stronger regional identity and sense of place;
- ◆ link related heritage, nature, open-space, and outdoor recreation resources for interpretation, promotion, and planning;

- ◆ develop a coordinated regional approach to their voluntary preservation and promotion;
- ◆ stimulate the economy of the region through increased heritage tourism, nature tourism, and other economic benefits of community-based, voluntary preservation;
- ◆ balance promotion and preservation to best benefit local communities; and
- ◆ improve cross-border connections between the United States and Mexico.

PROPOSED BOUNDARIES

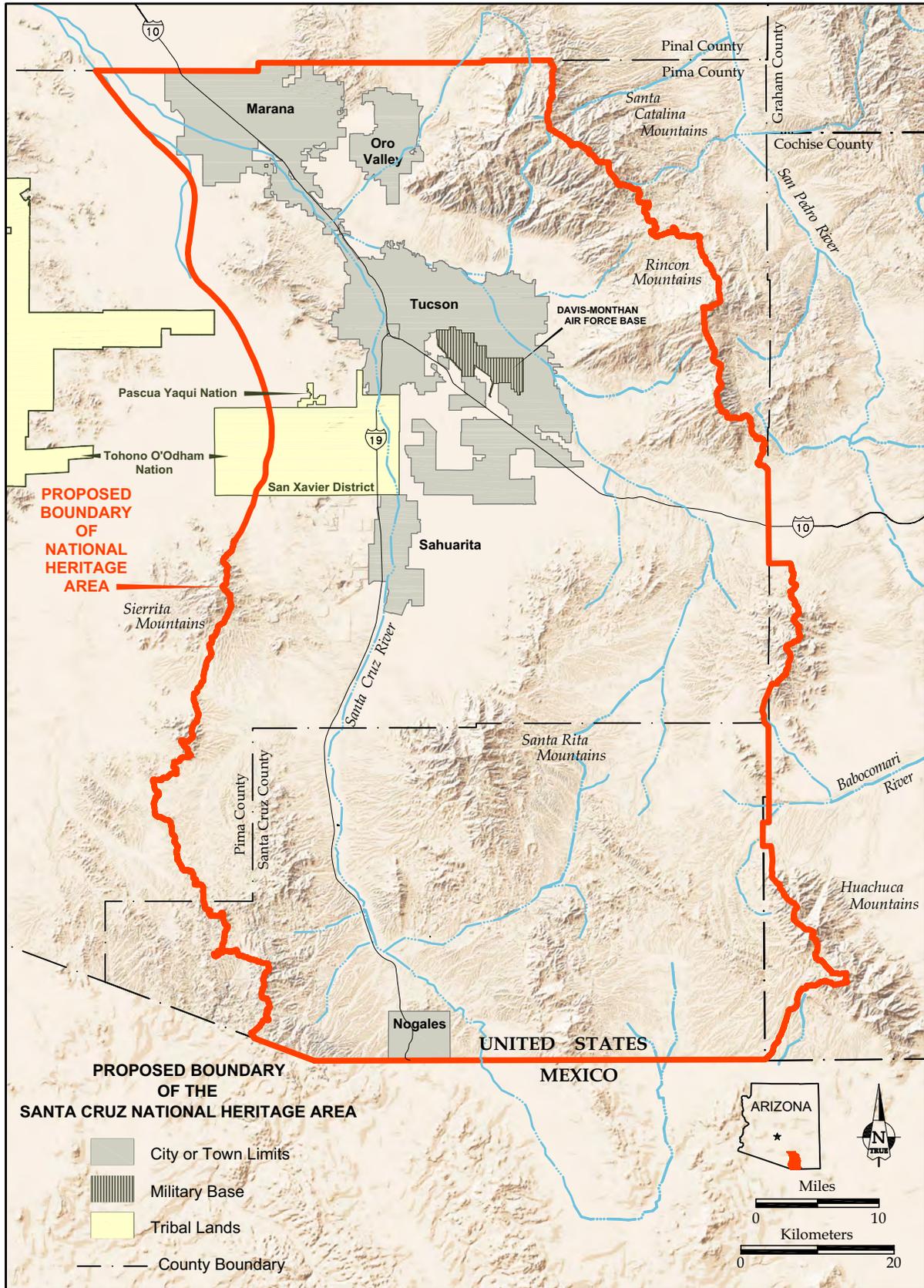
The proposed boundaries of a Santa Cruz Valley National Heritage Area encompass about 3,325 mi² in southern Arizona. The eastern and western boundaries are natural—they are essentially the watershed boundaries of the middle and upper Santa Cruz River and its tributaries, following the central spines of several bounding mountain ranges. These are the edges of the natural drainage basin, within which all surface and subsurface waters flow into the tributaries or main channel of the Santa Cruz River. The proposed eastern and western boundaries of the National Heritage Area deviate slightly from the edges of the watershed in only three places, in an effort to include the important nature and heritage attractions of the Arizona-Sonora Desert Museum and Old Tucson Studios and to exclude private lands in Cochise County.

Although a portion of the Santa Cruz River watershed lies in Sonora, Mexico, the southern boundary will be the United States-Mexico border, because the boundaries of National Heritage Areas cannot cross international borders. The proposed northern boundary will be the Pima County-Pinal County line, because the north-flowing Santa Cruz River stops flowing on the surface beyond this location, and because citizens of Pinal County are currently working toward their own National Heritage Area designation in the vicinity of the Casa Grande National Monument. An additional rationale for limiting the boundaries to the upper and middle watershed of the Santa Cruz River is that this region has a common natural and cultural heritage unique to the region, such as historically year-round river flows in several reaches and a chain of Spanish colonial missions, fortresses, and ranches throughout this part of the valley.

These proposed boundaries of a Santa Cruz Valley National Heritage Area include eastern Pima County and most of Santa Cruz County, the incorporated municipalities of Tucson, Marana, Oro Valley, South Tucson, Sahuarita, and Nogales, and also the unincorporated communities of Green Valley, Tubac, Amado, Patagonia, Sonoita, Elgin, Vail, Catalina, and Summerhaven. Also within the proposed boundaries are all the lands of the Pascua Yaqui Nation, and a large portion of the San Xavier District of the Tohono O'odham Tribe.

This area includes a mix of public and private lands. The largest public land holdings within these proposed boundaries are, in descending order:

- ◆ state lands, including four state parks (645,306 acres);
- ◆ Coronado National Forest lands (627,808 acres);
- ◆ National Park Service lands (92,067 acres);
- ◆ Bureau of Land Management lands (63,150 acres); and
- ◆ Pima County parks, preserves, and Flood Control District parcels (51,922 acres).



The proposed boundaries of the Santa Cruz Valley National Heritage Area.

These boundaries mark an area that is a source of identity for residents, is a coherent natural and cultural landscape, and has sufficient nature and heritage resources to support a National Heritage Area designation. The boundaries are not regulatory, and designation will have no effect on private property rights, land-use zoning, property taxes, or government and agency jurisdictions. An analogy for a Heritage Area is an “enterprise zone,” in which an area has been designated for voluntary participation to obtain benefits. Stakeholder projects within the boundaries will be eligible for funding and other assistance from the National Heritage Area, and the local managing entity may also choose to support projects in neighboring areas outside the boundaries.

DESCRIPTIONS OF INVOLVED ENTITIES

Some existing and new groups and institutions, as well as a unit of the National Park Service, have participated in the designation process. Three of these will be involved in the management of the National Heritage Area after designation. The following summarizes their roles.

Santa Cruz Valley Heritage Alliance, Inc.

- ◆ Incorporated in Arizona in 2004, as a nonprofit entity
- ◆ The Board of Directors is currently composed of 24 representatives of varying interests from throughout the region, with an equal number from each of the two counties within the proposed National Heritage Area
- ◆ New board members will be named in accordance with the specific formula identified in Chapter 6
- ◆ Has adopted bylaws
- ◆ A small Executive Committee will oversee operations
- ◆ Will be responsible for developing the Management Plan for the National Heritage Area, with funding from the U. S. Department of Interior
- ◆ Will negotiate 5-year Cooperative Agreements and annual amendments with a National Park Service partner
- ◆ Will likely develop a small paid staff
- ◆ Will have a major fundraising role
- ◆ Will be advised and assisted by a Partnership Council to incorporate stakeholder perspectives into plans
- ◆ Will be responsible for administering annual federal appropriations through a re-granting program

- ◆ Will evolve as the needs and capabilities of the National Heritage Area are better defined over time

Partnership Council

- ◆ Broadly representative group which will be assembled to advise the alliance board
- ◆ Will identify potential partnerships with the National Heritage Area
- ◆ Will have primary responsibility for review and selection of projects and programs to be assisted by the National Heritage Area; recommendations are provided to the Board of Directors
- ◆ Will identify long-term funding needs and priorities
- ◆ Will plan festivals and other events sponsored by the National Heritage Area
- ◆ Will conduct public outreach

Tumacácori National Historical Park

- ◆ Created through executive order by Theodore Roosevelt in 1908, as Tumacácori National Monument (9 acres); boundary changes in 1958 and 1978 enlarged the park to 15 acres; expanded by Congress into a National Historical Park including Guevavi (8 acres) and Calabazas (21 acres) in 1990; expanded by Congress to a total of 355 acres in 2004
- ◆ Serves as required National Park Service partner in development of Feasibility Study and Management Plan
- ◆ Will provide comments and input to National Park Service testimony about the Feasibility Study and the Management Plan
- ◆ Will be a partner in 5-year Cooperative Agreements with the alliance
- ◆ Will manage annual Congressional appropriations to the National Heritage Area through amendments to the Cooperative Agreement which describe the purposes of each year's funding
- ◆ Will be non-voting, ex officio member of the operational-phase Board of Directors of the management entity
- ◆ Will assist in the process for National Register nominations in the National Heritage Area
- ◆ Will provide expertise about Spanish Colonial heritage to the National Heritage Area and its partners

*Tumacácori
National
Historical Park
will be a partner
and guide in the
designation
process and
subsequent
management.*



Chapter 3

SUPPORTING RESOURCES

This chapter documents sufficient heritage, nature, open-space, and outdoor recreation resources within the proposed boundaries to support a National Heritage Area designation. Most of the listed resources are open to the public, including destinations, events, facilities, businesses, organizations, and other types. This inventory includes all National Historic Landmarks and properties listed on the National Register of Historic Places. It also includes several significant heritage sites that were identified during the preparation of this feasibility study – many of which are likely eligible for inclusion in the National Register. Appendices A-C include descriptions of the most important historic buildings, archaeological sites, and site clusters in the proposed National Heritage Area.

Some archaeological sites, historic buildings, ghost towns, traditional cultural places, and important natural areas are on private or tribal lands not open to the public. They are, however, included in this inventory because they are significant resources relevant to the interpretive themes of this National Heritage Area. Further, projects related to the recognition, preservation, restoration, and interpretation of resources on public, private, or tribal lands will be eligible for funding and technical assistance from the National Heritage Area.

This chapter concludes with a summary of local crafts, foods, and music styles that can be found in few, or no other, places in the United States. These distinctive regional traditions are also considered to be heritage resources that could be recognized, preserved, interpreted, and promoted through a National Heritage Area designation. They are relevant to the interpretive themes of this National Heritage Area and help to distinguish it from existing National Heritage Areas.

NATURAL, OPEN-SPACE, AND OUTDOOR RECREATION RESOURCES

The nature resources of the proposed Santa Cruz Valley National Heritage Area are ecologically important, including flowing streams, important desert, riparian, and grassland habitats, sky island mountain ranges with multiple life zones, unfragmented corridors for wildlife movements and migrations, and diverse plant and animal communities, including many endemic and tropical species not found in other regions of the United States.

The natural resources and open spaces of the valley also have aesthetic and recreational values that add to southern Arizona's high quality of life. These are major draws for visitors from other parts of the United States and from many countries. Resources for outdoor recreation and nature tourism include hundreds of miles of backcountry trails, many excellent birdwatching locations, and other natural attractions and outdoor recreation opportunities in Coronado National Forest, Saguaro National Park, Tumacácori National Historical Park, four state parks, and other parks, preserves, and public lands. Valley residents and visitors also enjoy many unobstructed views of scenic landscapes, clean air, and dark night skies full of stars.



National Heritage Areas are corridors or regions where historical, cultural, and natural resources combine to form unique landscapes that benefit from voluntary preservation and promotion.

Flora and Fauna

The proposed National Heritage Area contains an extraordinary array of plants and animals. This results from several factors, including the wide range of elevations, the convergence of the Sonoran and Chihuahuan deserts, and sky island mountain ranges that contain biological influences from the Rocky Mountains to the north and from the Sierra Madre Occidental to the south. A number of tropical and subtropical species reach the northern end of their ranges in this area, including jaguar (*Panthera onca*), coatimundi (*Nasua narica*), Mexican long-tongued bat (*Choeronycteris mexicana*), elegant trogon (*Trogon elegans*), violet-crowned hummingbird (*Amazilia violiceps*), banded rock rattlesnake (*Crotalus lepidus klauberi*), and many others.

Certain groups of animals are particularly well represented in the region, including bats, birds, and rattlesnakes. The area is particularly well known for bird watching due to the wide variety of species found there, including many Mexican species that only enter the United States in this border region. The sky islands, isolated from each other by broad desert valleys, often contain endemic species of small mammals, reptiles, arthropods, and so forth. These unique species are often found only in a single mountain range. The Nature Conservancy has identified a region encompassing the Huachuca Mountains, the San Rafael Valley grasslands, and other contiguous areas (mostly within the proposed National Heritage Area) as the most critical area in Arizona for conservation of flora and fauna. The proposed National Heritage Area is home to a large number of organizations that appreciate and conserve the flora and fauna of the region, including the Arizona Native Plant Society (southern region), the Southeast Arizona Butterfly Association, the Tucson Audubon Society, the Tucson Herpetological Society, and many more (see “Nature Organizations” section).

Flora and Fauna in the Proposed National Heritage Area

- ◆ More than 400 species of birds
- ◆ About 200 migrating bird species; the largest number in the United States

- ◆ More than 100 species of butterflies
- ◆ Sky island mountain ranges with unique species
- ◆ More than 25 bird species rarely found north of the Mexican border
- ◆ Focal species are Mexican gray wolf, jaguar, mountain lion, black bear, and northern goshawk
- ◆ More than 15 endangered species
- ◆ Nine areas have among the highest biological diversities in Arizona
- ◆ One area is ranked as the most critical area for biological conservation in Arizona
- ◆ Three land corridors are critical for wildlife movements and linkages
- ◆ Nine areas are critical habitats for birds

Public Lands

Of a total of some 2.1 million acres within the proposed boundaries, about 71 percent (1.5 million acres) of the Santa Cruz Valley National Heritage Area is public land of different types. Large holdings are managed by the United States government, the State of Arizona, Pima County, and local municipalities.

The National Park Service manages over 92,000 acres in the east and west units and associated wilderness areas of Saguaro National Park. Much smaller, but of critical importance to Spanish Colonial heritage and riparian habitat, is Tumacácori National Historical Park (recently expanded to 355 acres). Coronado National Forest manages about 648,000 acres in the proposed National Heritage Area, in three districts that encompass the Huachuca, Pajarito, Patagonia, Rincon, Santa Catalina, Santa Rita, Tumacácori, and Whetstone mountains, as well as the Canelo Hills. Within these Forest Service lands are over 140,000 acres in wilderness areas and natural areas. The Bureau of Land Management manages roughly 63,000 acres in rangelands, planning districts, and also the 42,000-acre Las Cienegas National Conservation Area.

Arizona state agencies manage 645,000 acres, including State Trust Lands (486,000), Arizona State Parks (37,000), and over 120,000 acres of conservation and natural areas. Pima County holds more than 50,000 acres in parks, recreation areas, conservation lands, and flood control parcels. Those holdings are being expanded to protect key biological resources and open spaces identified by the Sonoran Desert Conservation Plan. Smaller, but significant lands are managed by municipalities such as the City of Tucson and the Town of Marana.

Managers of Public Lands in the Proposed National Heritage Area

- ◆ Pima County
- ◆ State of Arizona
- ◆ Town of Marana
- ◆ U.S. Bureau of Land Management
- ◆ U.S. Bureau of Reclamation
- ◆ U.S. Department of Agriculture, Forest Service, Coronado National Forest, Santa Catalina, Nogales, and Sierra Vista Ranger Districts
- ◆ U.S. National Park Service

Public Lands, Parks, and Natural Preserves in the Proposed National Heritage Area

Managing Entity	Acres Within SCVNHA
Arizona Open Land Trust	
Catalina Foothills (easement)	12
Crescent Ridge (easement)	28
Subtotal	40
Arizona-Sonora Desert Museum	21
National Audubon Society	
Appleton-Whittell Research Ranch	8,000
Pima County	
Arthur Pack Regional Park	503
Canoa Ranch (easement)	1,642
Canoa Ranch (fee simple)	3,159
Cienega Creek Natural Preserve	3,979
Colossal Cave Mountain Park	2,140
Pima County Parklands Foundation	316
Roy P. Drachman Agua Caliente Park	101
Sweetwater Preserve	695
Southeast Regional Park	3,004
Tortolita Mountain Park	3,124
Tucson Mountain Park	19,544
West Branch of Santa Cruz River	74
Pima County and PCFCD Parcels	13,641
Subtotal	51,922
Rincon Institute	
Rocking K Ranch (management agreement)	1,200
Tanque Verde Creek (two easements)	27
Subtotal	1,227
Santa Cruz County	
Calabasas Park	25
Ronald R. Morris Park	13
Tubac North Facility Park	10
Subtotal	48
Southeast Arizona Land Trust	
San Rafael Valley (easement)	817
State of Arizona	
Arizona State Parks	
Catalina State Park	5,493
Patagonia Lake State Park	5,000
San Rafael State Park and Natural Area	3,550
San Rafael Ranch (easement)	17,500
Sonoita Creek State Natural Area	5,284
Tubac Presidio State Historic Park	11
Desert Laboratory, Tumamoc Hill Research Station	842
Las Cienegas National Conservation Area	2,307
Santa Rita Experimental Range and Wildlife Area	53,130
Sonoita Valley Aquisition Planning District	65,626
Sonoran Desert Station for Arthropod Research	388
State Trust Lands	486,175
Subtotal	645,306

Managing Entity	Acres Within SCVNHA
The Town of Marana	
Section 7/10 mitigation	3,531
Conservation easements	413
Subtotal	3,944
The Nature Conservancy, Arizona Chapter	
Patagonia-Sonoita Creek Preserve (fee simple)	850
Patagonia-Sonoita Creek Preserve (easements)	500
San Rafael Valley	1,050
Deeded lands (Pima County)	2,873
Easements (Pima County)	67
Subtotal	5,340
Tohono Chul Park	49
Tucson Audubon Society	
Esperanza Ranch (easement)	300
Esperero Canyon	15
Mason Audubon Center	20
Subtotal	335
U.S. Bureau of Land Management	
Las Cienegas National Conservation Area	41,972
Sonoita Valley Acquisition Planning District	7,917
Other BLM Lands	13,261
Subtotal	63,150
U.S. Bureau of Reclamation	
Posta Quemada Acquisition	155
U.S. Forest Service	
Coronado National Forest (excluding wilderness areas, natural areas, and a botanical area)	504,608
Butterfly Research Natural Area	1,129
Elgin Research Natural Area	355
Miller Peak Wilderness	20,190
Mt. Wrightson Wilderness	25,260
Pusch Ridge Wilderness	56,037
Rincon Mountain Wilderness	37,038
Santa Catalina Research Natural Area	881
Wild Chile Botanical Area	2,500
Subtotal	647,998
U.S. National Park Service	
Saguaro National Park East	8,938
Saguaro National Park East Wilderness	58,498
Saguaro National Park West	11,282
Saguaro National Park West Wilderness	12,994
Tumacácori National Historical Park	355
Subtotal	647,998
Total	1,520,419

Nature Parks

Many areas of biological, cultural, or historical significance have been designated as parklands under a variety of jurisdictions, including two national parks, four state parks, and six large

county parks. Federally managed parks include Saguaro National Park (91,700 acres in the east and west units and associated wildernesses) and Tumacácori National Historical Park (recently expanded to 355 acres). Popular natural and recreational areas in Coronado National Forest include Madera Canyon and Sabino Canyon. The Arizona State Parks system manages the Tubac Presidio State Historic Park, Patagonia Lake State Park, Catalina State Park, and San Rafael State Park and Natural Area (totaling over 30,000 acres). Pima County manages key resources such as Tucson Mountain Park (19,544 acres), Roy P. Drachman Agua Caliente Park (101 acres), and many others. Private and nonprofit conservation organizations have other holdings, including preserves managed by The Nature Conservancy, the Tucson Audubon Society, the Arizona-Sonora Desert Museum, and Tohono Chul Park.

Nature Parks and Preserves in the Proposed National Heritage Area

- ◆ Arizona Open Land Trust, Catalina Foothills and Crescent Ridge easements
- ◆ Arizona-Sonora Desert Museum
- ◆ Arthur Pack Regional Park, Pima County
- ◆ Butterfly Research Natural Area, Coronado National Forest, Santa Catalina Ranger District
- ◆ Calabasas Park, Nogales
- ◆ Canoa Ranch, Pima County
- ◆ Catalina State Park
- ◆ Christopher Columbus Park, Tucson
- ◆ Cienega Creek Natural Preserve, Pima County
- ◆ Colossal Cave Mountain Park, Pima County
- ◆ Desert Laboratory, Tumamoc Hill Research Station, State of Arizona
- ◆ Elgin Research Natural Area
- ◆ Esperero Canyon, Tucson Audubon Society
- ◆ Julian Wash Natural and Cultural Resources Park, Tucson (under development)
- ◆ Las Cienegas National Conservation Area, U.S. Bureau of Land Management
- ◆ Mason Audubon Center, Tucson Audubon Society
- ◆ Mount Wrightson Wilderness Area, Coronado National Forest, Nogales Ranger District
- ◆ National Audubon Society Appleton-Whittell Research Ranch
- ◆ Patagonia Lake State Park
- ◆ Patagonia Sonoita Creek Preserve, The Nature Conservancy
- ◆ Pima County Flood Control District parcels
- ◆ Pima County Parklands Foundation
- ◆ Posta Quemada Acquisition, U.S. Bureau of Reclamation
- ◆ Pusch Ridge Wilderness Area, Coronado National Forest, Santa Catalina Ranger District
- ◆ Reid Park, Tucson
- ◆ Rincon Institute, Tanque Verde Creek easement and Rocking K Ranch management agreement
- ◆ Rincon Mountain Wilderness Area, Coronado National Forest, Santa Catalina Ranger District
- ◆ Ronald R. Morris Park, Santa Cruz County
- ◆ Roy P. Drachman Agua Caliente Park, Pima County
- ◆ Saguaro National Park (east and west units and wilderness areas)
- ◆ San Rafael State Park and Natural Area
- ◆ Santa Catalina Research Natural Area, Coronado National Forest, Santa Catalina Ranger District



Parks, preserves, and public lands within the proposed National Heritage Area.

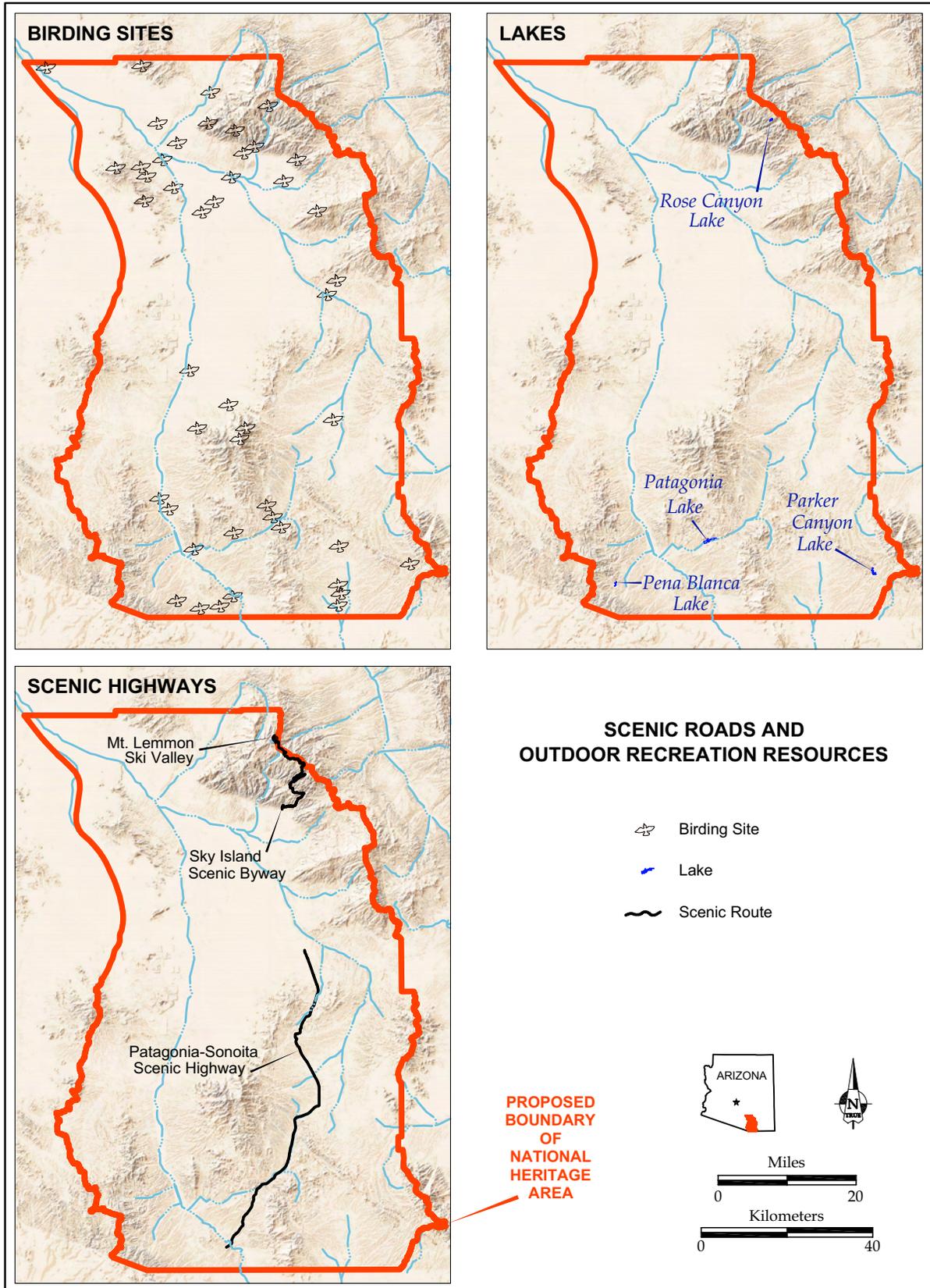
- ◆ Santa Rita Experimental Range and Wildlife Area, State of Arizona
- ◆ Sonoran Desert Station for Arthropod Research
- ◆ Sonoita Creek State Natural Area
- ◆ Sonoita Valley Acquisition Planning District, U.S. Bureau of Land Management
- ◆ Southeast Arizona Land Trust, San Rafael Valley easement
- ◆ Southeast Regional Park, Pima County
- ◆ Sweetwater Preserve, Pima County
- ◆ Tohono Chul Park, Tucson

Natural Preserves

Natural preserves totaling more than 400,000 acres protect key ecological resources in the proposed National Heritage Area. Examples on public lands include the state-managed Sonoita Creek State Natural Area, Pima County's Cienega Creek Natural Preserve, and the Bureau of Land Management-managed Las Cienegas National Conservation Area. The Bureau of Land Management preserve encompasses biologically key riparian resources, scenic mid-elevation grasslands, historic ranch buildings, and important prehistoric archaeological sites. The Cienega Creek Natural Preserve, managed by Pima County, contains biologically valuable riparian habitat in a region that has lost more than 90 percent of its original riparian areas. Pima County is also currently using bond money to acquire additional preserves determined by the Sonoran Desert Conservation Plan to be key to the survival of healthy populations of important indicator plant and animal species. Arizona State Parks conserves unique grasslands in the San Rafael Valley, as does the National Audubon Society in grasslands near Elgin (Appleton-Whittell Research Ranch). The Nature Conservancy runs the Patagonia-Sonoita Creek Preserve near Patagonia, another key riparian resource and important stop for birdwatchers from all over the world. Ecological resources on private lands are also preserved through conservation easements. These easements are managed by Arizona State Parks, Pima County, and some municipalities, as well as by nonprofit organizations such as The Nature Conservancy, the Tucson Audubon Society, the Arizona Open Land Trust, and the Southeast Arizona Land Trust.

Scenic Landscapes and Scenic Roads

Scenic landscapes are areas with little or no visible development, where sightseers are impressed by grand natural vistas or where stargazers enjoy dark night skies. Tucson's standards for outdoor lighting are stricter than most, minimizing the light pollution that many urban areas experience. For daytime views, few visitors will fail to be inspired by the rocky, saguaro-studded bajadas of Catalina State Park or the pine and wildflower fastness of the Huachuca Mountains. Those who are familiar with these kinds of landscapes may not be aware of the unparalleled vistas afforded by southeastern Arizona's mid-elevation grasslands, including the startlingly picturesque view across the San Rafael Valley. This valley (which has no visible utility lines for many square miles) has been selected many times by movie directors, and it is the site where *Oklahoma!* was filmed. However, scenic landscapes are visible in places other than the backcountry. Many paved highways offer miles of vistas. The proposed National Heritage Area has several designated scenic roads, including the Sky Island Scenic Byway (Mount Lemmon Highway) and the Sonoita-Patagonia Scenic Highway. This region



Scenic roads, birding sites, and lakes in the proposed National Heritage Area.

is replete with bright blue skies, the green of saguaros and mesquites, and a backdrop of purple mountains majesty.

Scenic Landscapes and Scenic Roads in the Proposed National Heritage Area

- ◆ Arivaca Road, Pima County
- ◆ Box Canyon Road, Coronado National Forest, Nogales Ranger District
- ◆ Cienega Creek Natural Preserve/Las Cienegas National Conservation Area
- ◆ Colossal Cave Road, Pima County
- ◆ Coronado National Forest
- ◆ Gates Pass Road, Pima County
- ◆ Kinney Road, Pima County
- ◆ Mission Road, Pima County
- ◆ Oracle Road, Pima County
- ◆ Picture Rocks Road, Pima County
- ◆ Pima County Mountain Parks
- ◆ Redington Road, Coronado National Forest, Santa Catalina Ranger District
- ◆ Saguaro National Park (east and west units and wilderness areas)
- ◆ San Rafael State Park and Natural Area/San Rafael Ranch easement
- ◆ Santa Rita Experimental Range and Wildlife Area
- ◆ San Xavier District, Tohono O'odham Nation
- ◆ Sahuarita Road, Pima County
- ◆ Sky Island Scenic Byway (Mount Lemmon Highway), Coronado National Forest
- ◆ Sonoita-Patagonia Scenic Highway
- ◆ South River Road, Santa Cruz County

Riparian Areas

Riparian describes the banks of streams and rivers, and the unique plants and animals found there. At lower elevations, riparian habitats are dominated by big, billowing willow and cottonwood trees. At higher elevations, these are joined by hackberry, sycamore, ash, walnut, alder, and other trees. In dry regions, such as southern Arizona, certain plants are found only in the moist areas along streams and rivers. Some animals that roam mountains and deserts depend on visits to riparian areas, where they can rest, drink, and sometimes hunt. Other animals spend their entire lives in riparian areas and cannot survive without them. These include many fish, frogs, and bird species. Some 60-75 percent of all wildlife species in this region depend on riparian areas at some point in their lives.

Riparian areas also function as movement or migration corridors for wildlife. North-south trending rivers (such as the Santa Cruz River) are important migratory routes for birds. Unfortunately, most estimates show that about 95 percent of riparian areas in southern Arizona have been lost to groundwater pumping, cutting of fuel wood, grazing, and development. Riparian trees and shrubs depend not so much on the water running in the stream, but on the fact that the soil is moist in the area along the stream, often from the presence of subsurface flow. Water tables are extremely sensitive to groundwater pumping (usually for metropolitan, agricultural, or mining use) and can quickly be lowered below the root zone of riparian plants. However, there are still some 90 miles of streams and rivers that flow year-round (although

some flow with treated effluent) that support riparian habitats that are both beautiful and critical for wildlife.

The rarity and biological importance of flowing water in the desert have been recognized by the designations of Las Cienegas National Conservation Area, and the Patagonia-Sonoita Creek and Canelo Hills National Natural Landmarks.

Riparian Areas with Perennial Surface Flows in the Proposed National Heritage Area

- ◆ Cienega Creek
- ◆ Davidson Canyon Creek
- ◆ Sabino Creek
- ◆ Santa Cruz River, San Rafael Valley reach
- ◆ Santa Cruz River, Rio Rico-to-Tubac reach
- ◆ Santa Cruz River, Tucson-to-Marana reach
- ◆ Sonoita Creek
- ◆ Tanque Verde Creek

Lakes

Lakes are rare in southern Arizona and many are man-made. However, they often provide crucial riparian and open water habitat in a region that has lost many of its natural riparian areas. The banks of lakes often harbor habitats for birds, small mammals, and frogs. Lakes act as migration stopovers or wintering grounds for many shorebirds, ducks, and other water birds. Lakes also provide recreation opportunities such as swimming, fishing, and boating, which would otherwise be rare in this arid region. Four major lakes in the region include Peña Blanca Lake, Parker Canyon Lake, Rose Canyon Lake, and the region's largest at Patagonia Lake State Park. Several other smaller lakes ring the Tucson area, including those at Kennedy Park, Roy P. Drachman Agua Caliente Park, Christopher Columbus Park, and the Kino Environmental Restoration Project.

Public Lakes in the Proposed National Heritage Area

- ◆ Christopher Columbus Park, Tucson
- ◆ Kennedy Park, Tucson
- ◆ Kino Environmental Restoration Project, Tucson
- ◆ Patagonia Lake State Park
- ◆ Parker Canyon Lake, Coronado National Forest, Sierra Vista Ranger District
- ◆ Peña Blanca Lake, Coronado National Forest, Nogales Ranger District
- ◆ Rose Canyon Lake, Coronado National Forest, Santa Catalina Ranger District
- ◆ Roy P. Drachman Agua Caliente Park, Pima County

Trails and Bikeways

In growing numbers, Americans are enjoying non-motorized transportation, particularly walking, hiking, horseback riding, and biking. Several clubs and organizations facilitate these

activities, such as the Southern Arizona Hiking Club and the Sonoran Desert Mountain Bicyclists. There are more than 600 miles of trails for hikers, equestrians, or cyclists in the proposed National Heritage Area. Some provide access to places that would be unavailable otherwise; for example, scenic landscapes and riparian areas. Others, like the Juan Bautista de Anza National Historical Trail between Tubac and Tumacácori, retrace historic footsteps, as well as provide access to bird-filled riparian forests.

Urban trail systems like those in the Santa Cruz River and Rillito River parks provide restless urbanites places to walk or ride near their homes. These river parks are part of 500 miles of urban bikeways in the Tucson metropolitan area that provide commuter and recreational routes for cyclists. Trails range in length from half-mile nature walks, to the Arizona Trail, which crosses the entire state, and the Anza Trail, which will eventually link southern Arizona with Mexico in one direction and the San Francisco Bay in the other. Many trails are accessible through developed trailheads, with parking, restrooms, picnic tables, and other amenities.

Trails and Bikeways in the Proposed National Heritage Area

- ◆ There are more than 500 miles of bikeways in the Tucson metropolitan area.
- ◆ More than 160 miles of bikeways in rural Pima and Santa Cruz counties are within the proposed National Heritage Area.
- ◆ There are more than 600 miles of trails for hiking, horseback riding, and/or mountain biking.
- ◆ Long segments of the Juan Bautista de Anza National Historical Trail and the Arizona Trail cross the proposed National Heritage Area.

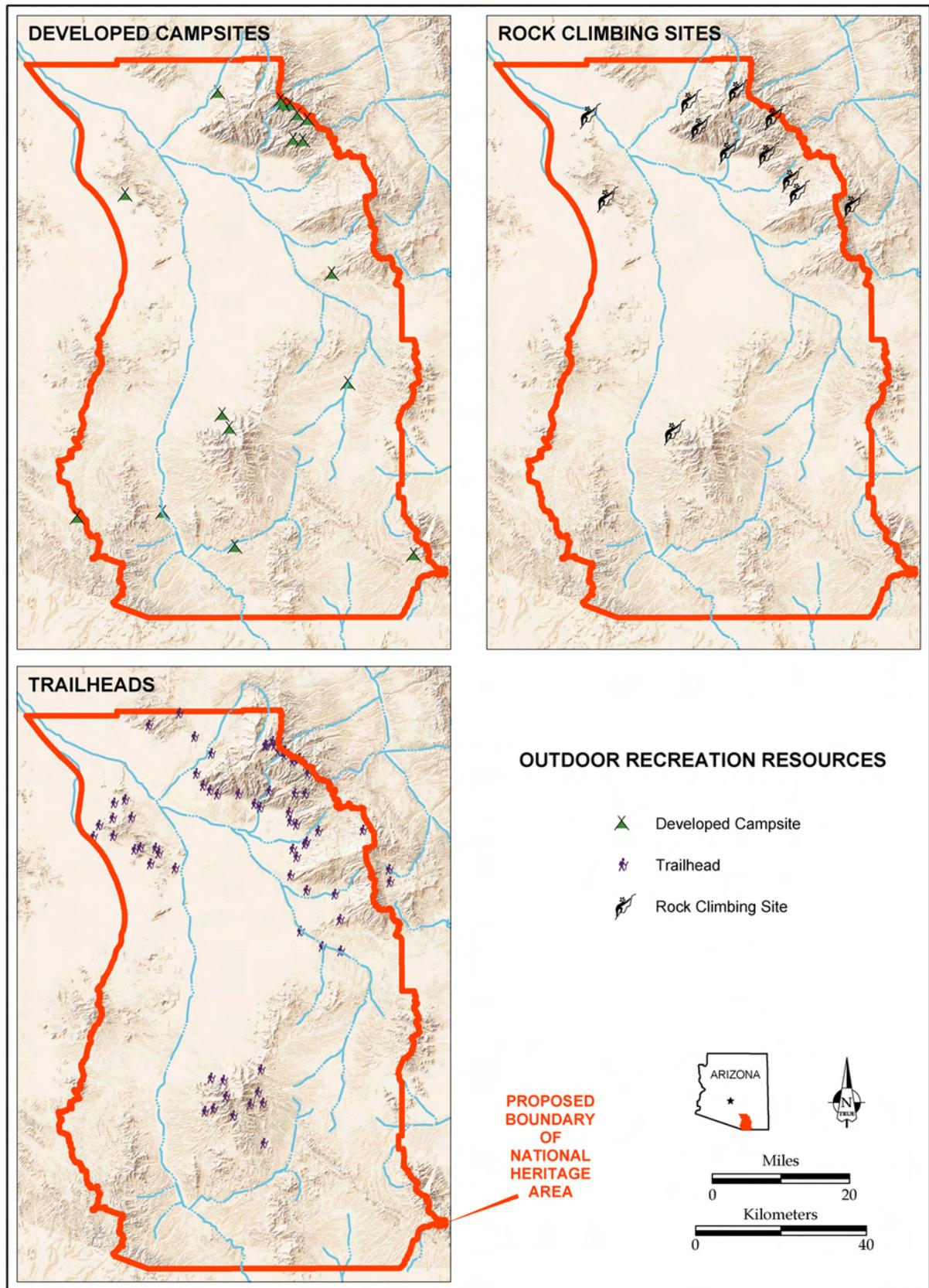
Camping Areas

There are many places to camp in the proposed National Heritage Area. These include 14 developed public campgrounds with moderate fees (developed camps in National Forests, State Parks, and so on), several developed private campgrounds (KOAs), and vast tracts of National Forest and Bureau of Land Management land where free camping is permitted almost anywhere (with a 100-foot limit away from water). Campgrounds are found in all kinds of ecological settings, from Sonoran Desert uplands such as Catalina State Park, to mid-elevation areas, like White Rock Campground near Peña Blanca Lake, to pine forests such as Bog Spring Campground in Madera Canyon.

Many major destinations such as National Parks, National Forests, and State Parks have campgrounds with various levels of amenities (water, toilets, showers, snack bars, and so forth). While campgrounds in the proposed National Heritage Area are designed to facilitate many recreational and educational uses, they are also perfect for relaxation. Campgrounds are often located in areas with beautiful sights, natural wonders, and trailheads that lead to more adventures.

Developed Public Campgrounds in the Proposed National Heritage Area

- ◆ Bog Springs, Coronado National Forest, Santa Nogales Ranger District
- ◆ Catalina State Park
- ◆ Colossal Cave Mountain Park, Pima County



Developed campsites, rock climbing sites, and trailheads in the proposed National Heritage Area.

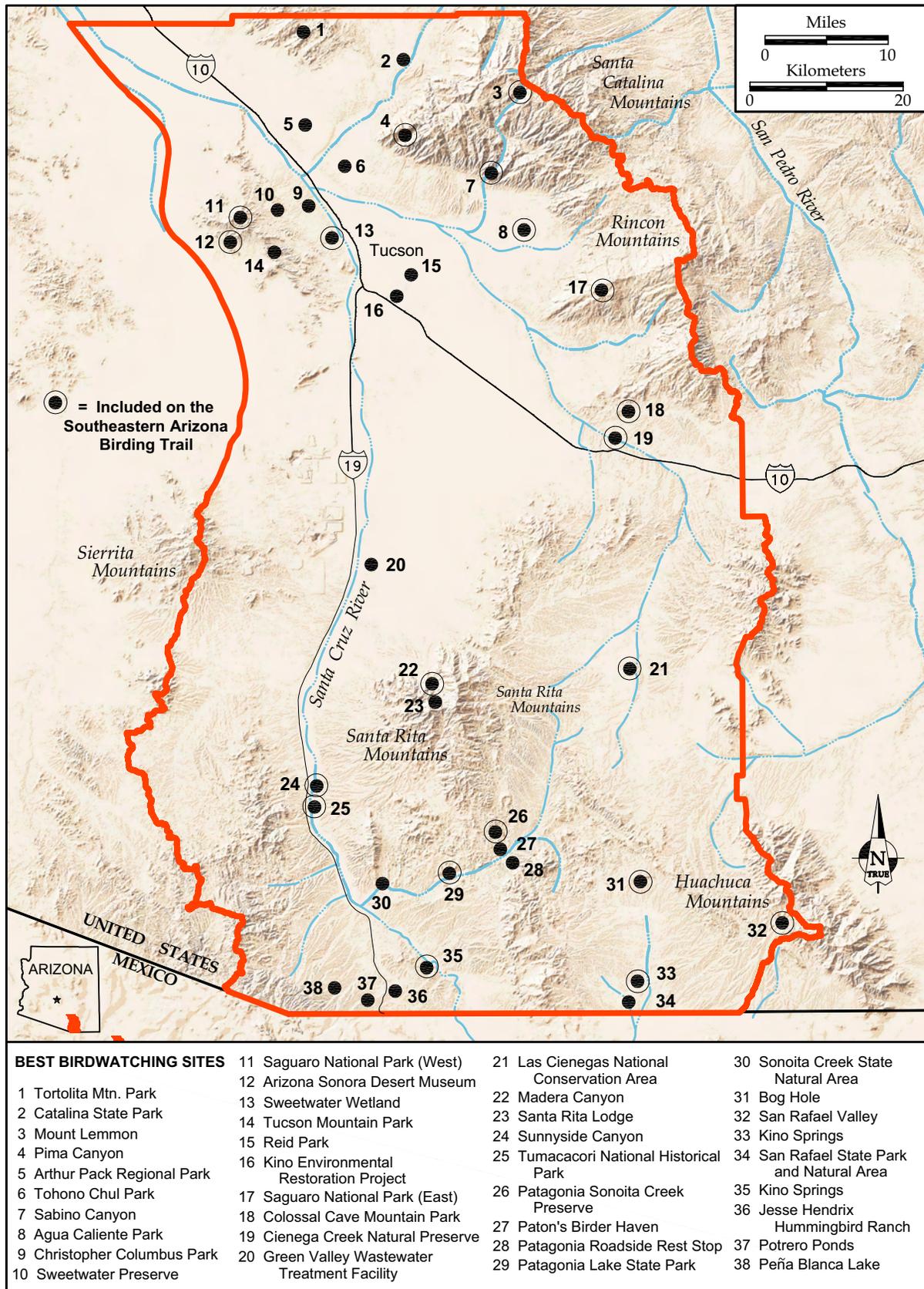
- ◆ General Hitchcock, Coronado National Forest, Santa Catalina Ranger District
- ◆ Gilbert Ray Campground, Tucson Mountain Park, Pima County
- ◆ Molino Basin, Coronado National Forest, Santa Catalina Ranger District
- ◆ Parker Canyon Lake, Coronado National Forest, Sierra Vista Ranger District
- ◆ Patagonia Lake State Park
- ◆ Peña Blanca Lake and Recreation Area, Coronado National Forest, Nogales Ranger District
- ◆ Peppersauce, Coronado National Forest, Santa Catalina Ranger District
- ◆ Rose Canyon, Coronado National Forest, Santa Catalina Ranger District
- ◆ Showers Point, Coronado National Forest, Santa Catalina Ranger District
- ◆ Southeast Regional Park, Pima County
- ◆ Spencer, Coronado National Forest, Santa Catalina Ranger District

Birdwatching Spots

Southeastern Arizona, which includes the proposed National Heritage Area, is unsurpassed among North American birdwatching (or birding) regions. A major birding magazine rated it second among birdwatching destinations in the United States. The diversity and rarity of bird species in southeastern Arizona is due to the available range of elevations and habitats. The affinities of the area to the Sierra Madre Occidental of Mexico makes it the northern extent of several Mexican species. Riparian areas harbor nesting neotropical migrants such as common black hawk, northern beardless-tyrannulet, and broad-billed hummingbird. Mid-elevation deserts and grasslands yields birds such as the varied bunting, Cassin's sparrow, and Montezuma quail. Sky island mountains draw buff-breasted flycatchers, magnificent hummingbirds, and elegant trogons. The region – particularly the north-south trending Santa Cruz Valley – is a major migratory corridor for species that winter in the tropics and nest north of the Mexican border. Over 400 bird species are found annually in southeastern Arizona. Most of these can be found in the proposed National Heritage Area, as can 20 of the 50 stops on the Southeast Arizona Birding Trail. Birding tourism to the proposed National Heritage Area is both domestic and international, with visitors coming from Western Europe, Australia, and other parts of the world. Inns and bed-and-breakfasts that cater specifically to birdwatchers dot the landscape. They often offer special resources such as bird feeders, advice on destinations, early breakfasts, and sack lunches.

Popular Birdwatching Spots in the Proposed National Heritage Area

- ◆ Arizona-Sonora Desert Museum
- ◆ Arthur Pack Regional Park, Pima County
- ◆ Anza Trail
- ◆ Bog Hole Wildlife Area
- ◆ Catalina State Park
- ◆ Christopher Columbus Park, Tucson
- ◆ Cienega Creek Natural Preserve, Pima County
- ◆ Colossal Cave Mountain Park, Pima County
- ◆ Green Valley Wastewater Treatment Facility, Green Valley
- ◆ Jesse Hendrix Hummingbird Ranch, Nogales
- ◆ Kino Environmental Restoration Project at Ajo detention basins
- ◆ Kino Springs



Birdwatching sites in the proposed National Heritage Area.

- ◆ Las Cienegas National Conservation Area
- ◆ Madera Canyon, Coronado National Forest, Nogales Ranger District
- ◆ Mount Lemmon, Coronado National Forest, Santa Catalina Ranger District
- ◆ Patagonia Lake State Park
- ◆ Patagonia Roadside Rest Stop
- ◆ Patagonia Sonoita Creek Preserve
- ◆ Paton's Birder Haven, Patagonia
- ◆ Peña Blanca Lake, Coronado National Forest, Nogales Ranger District
- ◆ Pima Canyon
- ◆ Potrero Ponds, Nogales
- ◆ Reid Park, Tucson
- ◆ Roy P. Drachman Agua Caliente Park, Pima County
- ◆ Sabino Canyon, Coronado National Forest, Santa Catalina Ranger District
- ◆ Saguaro National Park (east and west units and wilderness areas)
- ◆ San Rafael State Park and Natural Area
- ◆ San Rafael Valley
- ◆ Santa Rita Lodge
- ◆ Sonoita Creek State Natural Area
- ◆ Sunnyside Canyon
- ◆ Sweetwater Preserve, Pima County
- ◆ Sweetwater Wetland, Tucson
- ◆ Tohono Chul Park, Tucson
- ◆ Tortolita Mountain Park, Pima County
- ◆ Tucson Mountain Park, Pima County
- ◆ Tumacácori National Historical Park

Nature-based Museums and Gardens

Eleven nature museums and gardens are in the proposed National Heritage Area. The world-renowned Arizona-Sonora Desert Museum is one of the best-known attractions of this sort. Its combination of native animal zoo, Sonoran Desert plant preserve, and education projects has drawn people to its location west of Tucson for decades. However, several other museums and gardens highlight some of the distinctive attributes of the Sonoran Desert and the sky islands that tower above it.

Tohono Chul Park provides visitors with an intimate introduction to desert perennial plants and wildflowers, as well as annual festivals and educational events. A visit to the Tucson Botanical Gardens is serene and educational for those who want to learn about desert plants and how people have lived with them and have used them. The Tucson Botanical Gardens has a superb educational program for children and adults and is the meeting place for many clubs and organizations such as Arizona Native Plant Society, Gardeners of Tucson, and the Rose Society of Tucson. Tucson Audubon Society's Mason Audubon Center, on Tucson's northwest side, features an important ironwood-saguaro habitat. The center holds educational events and monthly public tours to educate about Sonoran Desert plants and wildlife. The visitors centers at both the east and west units of Saguaro National Park also have exhibits about Sonoran Desert geology and ecology. The unique ecosystems and high biological diversity of sky islands are interpreted at the Palisades and Sabino Canyon visitors centers in the Santa Catalina Ranger District of the Coronado National Forest. The International Wildlife

Museum in Tucson features dioramas of local wildlife in native habitats. The University of Arizona Herbarium has the largest collection in the world of plant specimens from Arizona and Sonora, Mexico. The campus Arboretum features both native and exotic varieties of ornamental trees, shrubs, and cacti, including a number of trees that are the largest living specimens in Arizona.

Nature-based Museums and Gardens in the Proposed National Heritage Area

- ◆ Arizona-Sonora Desert Museum
- ◆ International Wildlife Museum
- ◆ Mason Audubon Center, Tucson
- ◆ Palisades Visitor Center, Santa Catalina Ranger District, Coronado National Forest
- ◆ Sabino Canyon Visitor Center, Santa Catalina Ranger District, Coronado National Forest
- ◆ Saguaro National Park East Visitor Center
- ◆ Saguaro National Park West Visitor Center
- ◆ Tohono Chul Park, Tucson
- ◆ Tucson Botanical Gardens, Tucson
- ◆ University of Arizona Herbarium
- ◆ University of Arizona Campus Arboretum

Annual Events with Nature Themes

Ten nature-themed annual events in the proposed National Heritage Area celebrate everything from cacti to bird migrations to the arrival of the summer monsoon rainy season. The latter is preceded by the Día de San Juan Festival in Tucson, a fiesta dating to the Spanish Colonial era, which celebrates preparations to plant traditional crops that depended on the summer rains. Native peoples' intimate knowledge of nature is not entirely lost, as is demonstrated by June saguaro fruit harvests and other traditional food celebrations.

The Festival of Hummingbirds at the Tucson Community Center celebrates the large variety of native and migrating hummingbirds in this region. The Fiesta de los Aves in southeastern Arizona includes many local events. Tucson Audubon volunteers and others come to Tumacácori National Historical Park to perform an annual migratory bird count during spring bird migration. Several Christmas Bird Counts monitor resident winter bird populations within the proposed National Heritage Area.

Major seasonal milestones such as the spring Wildflower Festival at Tohono Chul Park, the Ironwood Festival at the Mason Audubon Center celebrating the blooming of ironwood tree, and traditional fall harvests inspire festivals all over the proposed National Heritage Area, including the October open house at the Native Seeds/SEARCH farm in Patagonia, coinciding with the Patagonia Fall Festival.

Annual Nature Events in the Proposed National Heritage Area

- ◆ Dia de San Juan Festival, Tucson
- ◆ Festival of Hummingbirds, Tucson
- ◆ Fiesta de los Aves International Migration Celebration, southeastern Arizona
- ◆ National Audubon Society Great Backyard Bird Count, nationwide

- ◆ Harvest Festival, Colossal Cave Mountain Park
- ◆ Ironwood Festival, Mason Audubon Center, Tucson
- ◆ Native Seeds/SEARCH San Juan Day Festival and Potluck, Patagonia
- ◆ Nogales Christmas Bird Count
- ◆ Patagonia Annual Christmas Bird Count
- ◆ Tucson Audubon Birdathon, southeastern Arizona
- ◆ Tucson Audubon Christmas Bird Count, Tucson
- ◆ Wildflower Festival, Tohono Chul Park, Tucson

Nature-related Lodging

More than 25 lodgings are located in scenic natural settings in the proposed National Heritage Area. They include simple cabins, bed-and-breakfasts, luxurious inns, and dude ranches. These accommodations welcome winter visitors, birdwatchers, butterfly enthusiasts, hikers, golfers, and people who simply want to be out of the city. They are often located near public lands and other heritage and nature tourism destinations such as national and state parks and birdwatching hotspots. These accommodations offer a wide range of special services to nature enthusiasts, equestrians, and history buffs.

Nature-related Lodging in the Proposed National Heritage Area (Partial List)

- ◆ Agave Grove B&B Inn, Tucson
- ◆ Amado Territory Inn, Amado
- ◆ Azure Gate B&B, Tucson
- ◆ Bed and Bagels of Tucson, Tucson
- ◆ Chuparosa Inn, Madera Canyon
- ◆ Cactus Cove B&B, Tucson
- ◆ Circle Z Guest Ranch, Patagonia
- ◆ Coyote Crossing B&B, Tucson
- ◆ CP Ranch, Nogales
- ◆ Desert Trails B&B, Tucson
- ◆ Dos Marias B&B, Nogales
- ◆ Duquesne House B&B, Patagonia
- ◆ Hacienda Corona de Guevavi, Nogales
- ◆ Karrels Double K Ranch B&B, Tucson
- ◆ Kentucky Camp, Coronado National Forest, Nogales Ranger District
- ◆ Madera Kubo B&B, Madera Canyon
- ◆ Mi Gatita Inn, Sahuarita
- ◆ Rex Ranch Resort, Amado
- ◆ Rio Rico Resort, Rio Rico
- ◆ Santa Rita Lodge, Madera Canyon
- ◆ Sonoita Inn, Sonoita
- ◆ The Old Benton Place, Sonoita
- ◆ The Secret Garden Inn, Tubac
- ◆ Tubac Golf Resort, Tubac
- ◆ Vineyard B&B, Sonoita

Other Nature-related Businesses

More than 45 nature related businesses sell everything from hiking gear and maps to bird food for backyard birds. Many local plant nurseries specialize in drought-tolerant, wildlife-attracting native plants. Nurseries and companies such as Wildlands Restoration (a source of native seeds) consult on returning disturbed areas back to native Sonoran Desert vegetation. Premier nature tourism companies will show visitors—and help them enjoy—the natural resources and watchable wildlife of the Santa Cruz River watershed. A number of businesses sell nature and tourist guidebooks to make visits to the area more efficient and informative.

Other Nature-related Businesses in the Proposed National Heritage Area (Partial List)

- ◆ Abbott and Cobb Nursery, Nogales
- ◆ Acacia Nursery, Marana
- ◆ Aimohila Adventures, Tucson
- ◆ Arid Lands Greenhouses, Tucson
- ◆ Arizona-Sonora Desert Museum Gift Shop
- ◆ Audubon Nature Shop, Tucson
- ◆ Bach's Greenhouse Cactus Nursery, Tucson
- ◆ B&B Cactus Farm, Tucson
- ◆ Bear Canyon Nursery, Tucson
- ◆ Borderland Tours, Tucson
- ◆ Catalina Cactus Company, Catalina
- ◆ Catalina Heights Nursery, Tucson
- ◆ Civano Nursery, Tucson
- ◆ Coronado Heights Wholesale Nursery, Tucson
- ◆ Desert Survivors Native Plant Nursery, Tucson
- ◆ Desert Trees Nursery, Tucson
- ◆ F & F Nursery, Nogales
- ◆ Greenbelt Nursery, Green Valley
- ◆ Great Western Tours, Tucson
- ◆ Harlow Gardens, Tucson
- ◆ High Lonesome Bird Tours, Sierra Vista
- ◆ Keller Nursery and Landscaping, Oro Valley
- ◆ La Ruta de Sonora Tours, Tucson
- ◆ Magic Garden Nursery, Tucson
- ◆ Mesquite Valley Growers, Tucson
- ◆ Miller's Surplus, Tucson
- ◆ Native Seeds/SEARCH, Tucson
- ◆ Old Pueblo Cactus, Tucson
- ◆ Outback Nursery, Green Valley
- ◆ Outdoor Adventures, Tucson
- ◆ Pima Valley Greenhouses, Tucson
- ◆ Plants of Distinction, Tucson
- ◆ Plants for the Southwest, Tucson
- ◆ Sheldon's Nursery, Tucson
- ◆ Silverbell Nursery, Tucson

- ◆ Sonoran Desert Nursery, Tucson
- ◆ Spanish Trail Outfitters, Tucson
- ◆ Stuart Healy, Western U.S. Bird Guide
- ◆ Southwest Trekking, Tucson
- ◆ Summit Hut, Tucson
- ◆ Tanque Verde Greenhouses, Tucson
- ◆ Tortolita Mountains Nursery, Marana
- ◆ Western National Parks Association Store, Oro Valley
- ◆ Wild Bird Store, Tucson
- ◆ Wild Birds Unlimited, Tucson
- ◆ Wildlands Restoration, Tucson

Nature and Outdoor Recreation Organizations

The wealth of nature resources in the proposed National Heritage Area is preserved, studied, and celebrated by some 20 nature-related organizations. Some of these organizations focus on particular life forms, such as the Southeast Arizona Butterfly Association and the Tucson Cactus and Succulent Society. Others are more general conservation organizations such as the Tucson Audubon Society or the Sonoran Institute. Still others focus on protecting and enhancing particular areas such as the Southeast Arizona Land Trust or the Friends of Saguaro National Park. Particularly interesting are groups of ranchers who are banding together to maintain open space and unique traditions in the face of urban sprawl, as is the case with the Sonoita Valley Planning Partnership.

There are 16 outdoor recreation organizations as well, including the Southern Arizona Hiking Club and the Sonoran Desert Mountain Bicyclists. Some organizations specialize in trails, such as the Anza Trail Coalition and the Pima Trails Association. Trail maintenance is also an interest of some equestrian groups, such as the Tucson Mountain Riders. Nature-related organizations and coalitions, such as the Coalition for Sonoran Desert Protection, advocate for open space and habitat, research and educate about ecology or specific life forms, or work to preserve traditional ways of relating to the natural world. Perhaps unique among local organizations, Native Seeds/SEARCH preserves seeds of native crops and the traditional knowledge about their growth and use.

Nature Organizations in the Proposed National Heritage Area

- ◆ Arizona Native Plant Society, Tucson
- ◆ Arizona Open Land Trust, Tucson
- ◆ Arizona Watchable Wildlife Tourism Association, Patagonia
- ◆ Coalition for Sonoran Desert Protection, Tucson
- ◆ Friends of Madera Canyon, Green Valley
- ◆ Friends of Saguaro National Park, Tucson
- ◆ Native Seeds/SEARCH, Tucson
- ◆ Pima County Parklands Foundation, Vail
- ◆ Pima Trails Association, Tucson
- ◆ Rincon Institute, Tucson
- ◆ Sierra Club, Rincon Group

- ◆ Sky Island Alliance, Tucson
- ◆ Sonoran Arthropod Studies Institute, Tucson
- ◆ Sonoran Desert Weed Whackers, Tucson
- ◆ Sonoran Institute, Tucson
- ◆ Southern Arizona Butterfly Association, Hereford
- ◆ The Nature Conservancy, Arizona Chapter, Tucson
- ◆ Tucson Audubon Society, Tucson
- ◆ Tucson Cactus and Succulent Society, Tucson
- ◆ Tucson Herpetological Society, Tucson
- ◆ Western National Parks Association, Tucson

Outdoor Recreation Organizations in the Proposed National Heritage Area

- ◆ Arizona Trail Association, Phoenix
- ◆ County Line Riders of Catalina
- ◆ Greater Arizona Bicycling Association, Tucson Chapter
- ◆ Green Valley Recreation Hiking Club
- ◆ Sonoran Desert Mountain Bicyclists, Tucson
- ◆ Southeastern Arizona Horseman's Association, Vail
- ◆ Southern Arizona Hiking Club, Tucson
- ◆ Southern Arizona Mountain Bike Association, Tucson
- ◆ Southern Arizona Roadrunners, Tucson
- ◆ The Nature Loop, Tucson
- ◆ Tucson Climber's Association
- ◆ Tucson Mountain Riders
- ◆ Tucson Orienteering Club
- ◆ Tucson Saddle Club
- ◆ Tucson Volkssport Walking Klub
- ◆ University of Arizona Ramblers, Tucson

HERITAGE RESOURCES

The heritage resources of the proposed Santa Cruz Valley National Heritage Area are incredibly rich and diverse due to: (1) the long human presence in this region; (2) its function as a corridor for exploration, contact, and colonization for a succession of cultures; and (3) its unique mix of living cultural traditions with deep historical roots. Types of heritage resources include working historic landscapes, historic communities and neighborhoods, ghost towns, historic trails, historic buildings, traditional cultural places, historical museums and parks, heritage and cultural events, historic lodgings, and heritage organizations. Within the proposed National Heritage Area are several National Historic Landmarks and a large number of historic districts and buildings listed on the National Register of Historic Places. As well as historical value, the heritage resources of this region also have cultural and aesthetic values that add to a sense of place for valley residents, and that attract visitors from all over the world. Some of the unique heritage resources of this region include:

- ◆ archaeological remains of 12,000 years of human occupation, including those of the earliest known farming villages and irrigation canals in western North America;

- ◆ stunning examples of well-preserved Spanish Colonial architecture at the Mission San Xavier del Bac and Tumacácori National Historical Park;
- ◆ the Juan Bautista de Anza National Historical Trail being developed along the route of the 1775 expedition that founded San Francisco;
- ◆ nineteenth-century mining ghost towns;
- ◆ working cattle ranches more than 100 years old;
- ◆ ruins of pre- and post-Civil War United States military posts; and
- ◆ historic communities and neighborhoods characterized by Sonoran- and Territorial-style architecture and streetscapes.

Working Historic Landscapes

Outside the cities and towns, the Santa Cruz Valley is a working landscape with 12 rural areas that support traditional livelihoods. Native Americans with prehistoric roots continue to live and farm along the river in the San Xavier District of the Tohono O'odham Nation. Mexican-Americans who trace their lineages back to the eighteenth century in this region continue to farm and ranch. Anglo ranching families raise cattle on the same valley lands as their nineteenth-century ancestors. Extensive ranchlands are located in the Empire-Cienega and San Rafael valleys, in the Amado and Sópore Wash areas, and in the foothills of the Rincon, Santa Rita, and Sierrita mountains. Farming landscapes include the Marana cotton fields, the Green Valley pecan orchards, and the vineyards around Sonoita and Elgin. This region is an important producer of beef (including organic, grass-fed beef), cotton, pecans, wines, and spices. The 300-year history of metal mining continues with the operation of copper mines near Green Valley. Two areas where current farming and ranching can be traced back into history are listed on the National Register of Historic Places as National Rural Historic Landscapes.

Working Historic Landscapes in the Proposed National Heritage Area

- ◆ Amado-Sopore Wash ranchlands
- ◆ Catalina area peach and apple orchards
- ◆ Empire-Cienega Valley ranchlands
- ◆ Green Valley area pecan orchards
- ◆ Marana cotton farms
- ◆ Rincon Mountains ranchlands
- ◆ San Rafael Valley ranchlands
- ◆ Santa Rita Experimental Range and Santa Rita Mountains ranchlands
- ◆ Sierrita Mountains copper mines
- ◆ Sierrita Mountains ranchlands
- ◆ Sonoita and Elgin area vineyards and orchards
- ◆ Tortolita Fan ranchlands

National Register Rural Historic Landscapes in the Proposed National Heritage Area

- ◆ Binghampton, Pima County
- ◆ Pennington, Santa Cruz County

Historic Communities

The Santa Cruz Valley has 15 historic communities founded by, or before, 1910, that are still occupied today. Two have been inhabited since prehistoric times, and they are among the oldest continuously occupied communities in the United States. Archaeological investigations have demonstrated that the foot of A-Mountain, the birthplace of Tucson, has been occupied almost without interruption for more than 4,000 years. Historical records indicate the Native American settlement at San Xavier del Bac has been occupied since before European contact in 1691, and its roots probably extend far back into prehistory. Tumacácori was also occupied by Native Americans prior to 1691, but was abandoned during several intervals since that time. Tubac was established by the Spanish in 1752, but also experienced periods of abandonment. The former mining boomtowns of Duquesne, Harshaw, and Greaterville have retained (or regained) a few residents since their heydays in the 1870s, and Nogales, Patagonia, Sonoita, Elgin, Lochiel, and Vail have been inhabited since the early 1880s. Amado was established during the early twentieth century. Many of these historic communities have well-preserved historic buildings, streets, and neighborhoods still used today.

Historic Communities in the Proposed National Heritage Area

- ◆ Amado (1910 to present)
- ◆ Duquesne, Santa Cruz County (1880 to present)
- ◆ Greaterville, Pima County (1874 to present)
- ◆ Harshaw (1875 to present)
- ◆ Lochiel (1884 to present)
- ◆ Marana (1890 to present)
- ◆ Nogales (1880 to present)
- ◆ Patagonia (1882 to present)
- ◆ San Xavier del Bac (pre-1691 to present)
- ◆ Sonoita and Elgin (1882 to present)
- ◆ Summerhaven (1924 to present)
- ◆ Tubac (1752 to present)
- ◆ Tucson (circa 2000 B.C. to present)
- ◆ Tumacácori (pre-1691 to present)
- ◆ Vail (1881 to present)

Mining Ghost Towns

The mountain ranges in the proposed National Heritage Area contain more than a dozen mining ghost towns, most of them in the Santa Rita, Patagonia, and Sierrita mountains. Although precious metal mining goes back to Spanish Colonial times, the ghost towns visible

today are remnants of a series of short-lived mining rushes for gold and silver between the 1870s and the early twentieth century. Greaterville, Harshaw, Duquesne, and Lochiel still have a few inhabitants today (see also “Historic Communities” above), although not close to the populations of their boomtown days. Many ghost towns are on private property, but can be easily viewed from Forest Service roads that pass near, or through, them. A few, like Kentucky Camp and Harshaw, are within the Coronado National Forest and are open to the public.

Mining Ghost Towns in the Proposed National Heritage Area

- ◆ Alto, Santa Cruz County (1875-1933)
- ◆ Duquesne, Santa Cruz County (1880 to present)
- ◆ Greaterville, Pima County (1874 to present)
- ◆ Harshaw, Santa Cruz County (1875 to present)
- ◆ Helvetia, Pima County (1880s - 1911)
- ◆ Kentucky Camp, Santa Cruz County (1874-1904)
- ◆ Lochiel, Santa Cruz County (1884 to present)
- ◆ Mowry, Santa Cruz County (1857-1913)
- ◆ Olive, Pima County (1880s-1892)
- ◆ Old Rosemont, Pima County (1894-1910)
- ◆ New Rosemont, Pima County (1915-1919)
- ◆ Salero, Santa Cruz County (early 1700s and 1884-1890)
- ◆ Total Wreck, Pima County (1879-1890)

Historic Trails

Parks and other public lands in the Santa Cruz Valley have many miles of historic trails first used in the eighteenth and nineteenth centuries that are still used today by hikers, horseback riders, and mountain bikers. Many of these trails were originally built for access to mines and mining camps during the late nineteenth century. Other trails were early stagecoach routes (the Butterfield Overland Mail Trail, 1858-1861), and still others were routes of Spanish explorers and expeditions. The Juan Bautista de Anza National Historical Trail, designated in 1990, commemorates the expedition that passed through the Santa Cruz Valley in 1775, and established the community of San Francisco. Several sections of the trail in Santa Cruz County – including the stretch between Tumacácori National Historical Park and Tubac Presidio State Historic Park – have been developed for hikers and birdwatchers and are marked with interpretive signs. The Anza Trail Coalition of Arizona and Pima County plan to develop more stretches and connect them, and the Metropolitan Tucson Convention and Visitors Bureau has begun promoting heritage tourism along the Anza Trail. The nonprofit Empire Ranch Foundation is developing the Empire Ranch Heritage Trail, with interpretative signs about historic ranch life in the Empire-Cienega Valley. The Army Corps of Engineers is working with local stakeholders on development of the Paseo de Las Iglesias along the Santa Cruz River between San Xavier and downtown Tucson. The 7.5-mile-long project will include riparian habitat restoration and develop another stretch of the Anza Trail.

Historic Trails in the Proposed National Heritage Area (Partial List)

- ◆ Agua Caliente (Vault Mine) Trail, Santa Rita Mountains, 1899
- ◆ Box Camp Trail, Santa Catalina Mountains, 1897
- ◆ Butterfield Overland Mail Trail, Pima County, 1858-1861
- ◆ Cactus Forest Trail, Rincon Mountains, 1880
- ◆ Carter's Trail, Santa Catalina Mountains, 1884
- ◆ David Yetman Trail, Tucson Mountains, 1931
- ◆ Empire Ranch Heritage Trail, Cienega Valley, 1870s
- ◆ Florida Saddle Trail, Santa Rita Mountains, 1880s
- ◆ Freeman Homestead Trail, 1920s
- ◆ Hugh Norris Trail, Tucson Mountains, 1870s
- ◆ King Canyon Trail, Tucson Mountains, 1917
- ◆ Juan Bautista de Anza National Historical Trail, west bank of Santa Cruz River, 1775
- ◆ Manning Camp Trail, Rincon Mountains, circa 1900
- ◆ Pontatoc Ridge Trail, Santa Catalina Mountains, 1907
- ◆ Romero Canyon Trail, Santa Catalina Mountains, 1889
- ◆ Sendero Esperanza Trail, Tucson Mountains, 1905
- ◆ Starr Pass Trail, Tucson Mountains, 1884
- ◆ Tanque Verde Ridge Trail, Rincon Mountains, 1860s
- ◆ Webber Trail, Santa Catalina Mountains, circa 1896
- ◆ Weldon Trail, Santa Catalina Mountains, circa 1882

National Historic Landmarks

Some historic places are designated as National Historic Landmarks because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Fewer than 2,500 historic places bear this national distinction. The National Historic Landmarks program is administered by the National Park Service, which is part of the U.S. Department of the Interior. Six National Historic Landmarks are located in the proposed Santa Cruz Valley National Heritage Area. These include four Spanish colonial missions (Guevavi, Calabazas, San Xavier, and Tumacácori), a research center for desert environments established in 1903 (the University of Arizona's Desert Laboratory), and a silo for an intercontinental ballistic missile built during the Cold War (the Titan Missile Silo).

National Historic Landmarks in the Proposed National Heritage Area

- ◆ Desert Laboratory
- ◆ Mission Los Santos Angeles de Guevavi
- ◆ San Cayetano de Calabazas
- ◆ San Xavier del Bac
- ◆ Titan Missile Silo
- ◆ Tumacácori Museum



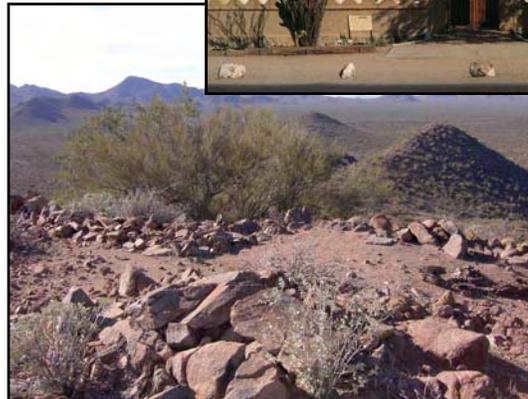
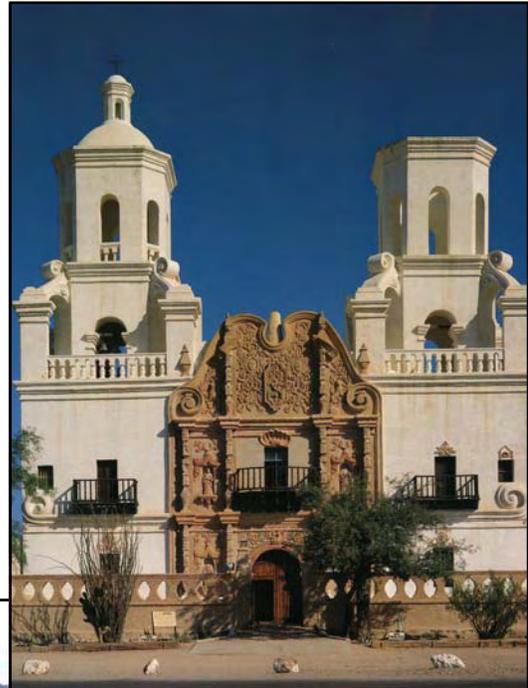
Santa Cruz County has many well-preserved historic structures and distinctive cultural landmarks.



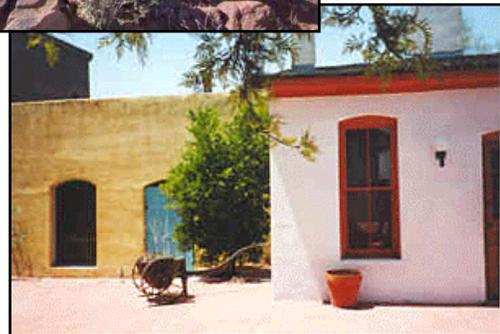
National Register Properties

The National Register of Historic Places is the nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our significant historic and archaeological resources. Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S.

The rich heritage of Pima County is also represented by numerous historic buildings, archaeological sites, and traditional cultural places.



A National Heritage Area will help the two counties work together to increase recognition of the places that make our region unique.



Department of the Interior. The proposed Santa Cruz Valley National Heritage Area contains 28 districts and 102 individual buildings listed on the National Register of Historic Places.

National Register Historic Districts in the Proposed National Heritage Area

- ◆ Armory Park, Tucson
- ◆ Barrio El Hoyo, Tucson
- ◆ Barrio Libre, Tucson
- ◆ Blenman-Elm, Tucson

- ◆ Catalina Vista, Tucson
- ◆ Colonia Solana, Tucson
- ◆ Colossal Cave Preservation Park, Pima County
- ◆ Crawford Hill, Nogales
- ◆ El Encanto Estates, Tucson
- ◆ El Montevideo, Tucson
- ◆ El Presidio, Tucson
- ◆ Fort Lowell, Tucson
- ◆ Indian House Community, Tucson
- ◆ Iron Horse Expansion, Tucson
- ◆ Kentucky Camp, Coronado National Forest
- ◆ Marsh Heights, Nogales
- ◆ Menlo Park, Tucson
- ◆ Patagonia
- ◆ Pie Allen, Tucson
- ◆ Ruby, Santa Cruz County
- ◆ Sam Hughes neighborhood, Tucson
- ◆ San Agustín del Tucson, Tucson
- ◆ John Spring neighborhood, Tucson
- ◆ Speedway-Drachman, Tucson
- ◆ Tubac Townsite, Tubac
- ◆ Tucson Warehouse, Tucson
- ◆ University of Arizona campus, Tucson
- ◆ West University, Tucson

Individual National Register Properties in the Proposed National Heritage Area

- ◆ Pima County: 59 buildings or structures outside of National Register Districts
- ◆ Santa Cruz County: 43 buildings or structures outside of National Register Districts

Other Important Historic Properties

The Sonoran Desert Conservation Plan has identified 52 buildings and four streetscapes in Pima County as Priority Cultural Resources worthy of preservation and eligible for inclusion in the National Register. In an inventory specially conducted for this feasibility study, the University of Arizona's Preservation Studies Program has identified 24 buildings and 12 districts in Santa Cruz County eligible for the National Register, but not currently listed. Appendix A includes descriptions of some of the most important historic properties in the proposed National Heritage Area. This list is a small sample of the historic properties that are likely eligible for inclusion in the National Register.

Other Important Historic Properties in the Proposed National Heritage Area

- ◆ Pima County: 52 buildings and four streetscapes are Priority Cultural Resources not currently on the National Register
- ◆ Santa Cruz County: 24 buildings, sites, or objects; 12 districts not currently on the National Register

Important Archaeological Sites and Districts

The Santa Cruz Valley has been an important borderlands corridor and homeland for millennia. The oldest artifacts found in this region indicate human presence since at least 12,000 years ago. Maize agriculture spread northward through this valley 4,000 years ago. The early farming culture that flourished in the valley for the next 2,000 years developed the earliest pottery, canals, and villages in western North America. Later in prehistory, the valley was a boundary between the Hohokam culture spreading southward from the Phoenix Basin and the Trincheras culture centered in northern Sonora. When the first Spanish colonists and Jesuit missionaries arrived in the late seventeenth century, they found numerous villages of the Sobaipuri Pima (O'odham) Indians along the riverbanks. Archaeological sites containing artifacts, remnants of structures, and human remains are the physical traces of these prehistoric cultures and events. Historic archaeological sites may or may not have standing structures. More than 5,000 archaeological sites have been recorded in the proposed Santa Cruz Valley National Heritage Area. There are five National Register Archaeological Districts in this region.

The Sonoran Desert Conservation Plan for Pima County has also identified 56 prehistoric and historic Priority Archaeological Sites and 22 prehistoric Priority Archaeological Site Complexes in Pima County in the proposed National Heritage Area. An inventory of archaeological sites in Santa Cruz County conducted for this feasibility study identified another eight prehistoric and historic important archaeological sites and four important archaeological site clusters in Santa Cruz County in the proposed National Heritage Area. Only one historical archaeological site (Warner's Mill) is currently listed on the National Register. The remainder of these sites, site complexes, and site clusters are likely eligible for inclusion in the National Register. Appendices B and C include descriptions of these important archaeological sites and site clusters in the proposed National Heritage Area.

Important Archaeological Sites in the Proposed National Heritage Area

- ◆ one historic archaeological site on the National Register (see Appendix B)
- ◆ 44 prehistoric and 20 historic Important Archaeological Sites currently not on the National Register (see Appendix B)

Important Prehistoric Archaeological Districts and Site Clusters in the Proposed National Heritage Area

- ◆ Los Robles Archaeological District (see Appendix C)
- ◆ Sutherland Wash Archaeological District (see Appendix C)
- ◆ Sutherland Wash Rock Art District (see Appendix C)
- ◆ Rincon Mountain Foothills Archaeological District (see Appendix C)
- ◆ Upper Davidson Canyon Archaeological District (see Appendix C)
- ◆ 27 additional Important Archaeological Site Clusters currently not on the National Register (see Appendix C)

Traditional Cultural Places and Landmarks

Certain places on the landscape are associated with cultural practices or beliefs of a living community. These traditional cultural places are rooted in the history of that community and

are important in maintaining its continuing cultural identity. The proposed Santa Cruz Valley National Heritage Area has numerous traditional cultural places important to Native American tribes, Mexican-Americans, or residents of historic neighborhoods. Traditional cultural places of the Tohono O'odham tribe include certain mountain peaks, springs, caves, and other natural landmarks; the church and nearby shrines at the San Xavier Mission; and prehistoric archaeological sites they associate with their ancestors. For members of the Pascua Yaqui Tribe, traditional cultural places include the church and courtyard in Old Pascua neighborhood where annual Easter ceremonies are performed.

In historic barrios and along roadsides, valley residents with cultural roots in Mexico have built many Catholic shrines honoring saints (for example, Saint Jude's Shrine, El Señor de Los Milagros Shrine), the Virgin Mary (Grande Avenue Shrine), deceased relatives (Telles Grotto), and traditional folk heroes (El Tiradito). Oral history identifies the Oak Tree Church as a grove of trees at the headwaters of Sonoita Creek where, lacking a church building, local residents met outdoors for Catholic religious ceremonies during the early nineteenth century. The La Capillita and the De Grazia Chapel, while not sanctified churches, are important cultural and religious centers for residents of the surrounding neighborhoods. The following list is a selection of some of the best-known traditional cultural places in the Santa Cruz Valley.

*Traditional Cultural Places and Landmarks in the Proposed National Heritage Area
(Partial List)*

- ◆ De Grazia Chapel, Tucson
- ◆ El Señor de Los Milagros shrine, Menlo Park neighborhood, Tucson
- ◆ El Tiradito (Wishing Shrine), Barrio Historico, Tucson
- ◆ Garden of Gethsemane (Felix Lucero Park), Tucson
- ◆ Grande Avenue Shrine, Tucson
- ◆ La Capillita, Fort Lowell neighborhood, Tucson
- ◆ Oak Tree Church, near Sonoita
- ◆ Old Pascua church and courtyard, Tucson
- ◆ San Xavier Mission and nearby shrines, San Xavier District of the
- ◆ Tohono O'odham Nation
- ◆ Saint Jude's Shrine, South Tucson
- ◆ Stone Avenue Temple, Tucson
- ◆ Telles Grotto Shrine, Patagonia

Archaeological, Historical, and Cultural Museums

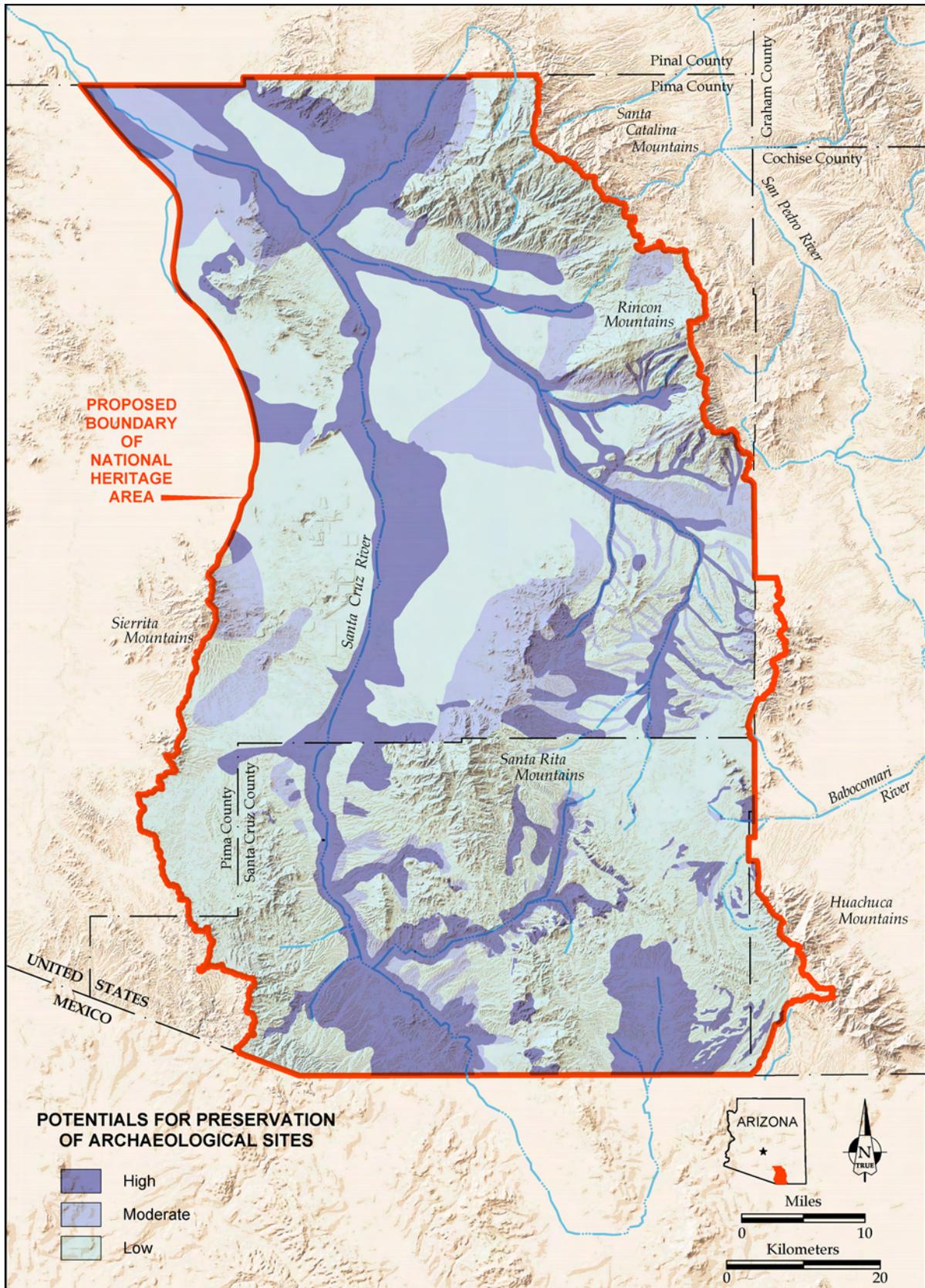
The proposed Santa Cruz Valley National Heritage Area has 29 museums that interpret local archaeology, history, and cultures. The Arizona State Museum is internationally recognized for its important collections and popular exhibits on Southwest prehistory and Native American cultures. The Arizona Historical Society Museum in Tucson, and the Pimería Alta Historical Society in Nogales, have permanent and rotating exhibits about local and state history. The Arizona Historical Society Downtown Museum specializes in exhibits about the history of downtown Tucson. The entire 4,000-year history of Tucson will be interpreted at the City of Tucson's planned Tucson Origins Heritage Park. The history of the Santa Cruz Valley during the Spanish colonial and Mexican periods are interpreted at Tubac Presidio State Historic Park, Tumacácori National Historical Park, and the Sosa-Carillo-Frémont House and La Casa

Map illustrating historic and archaeological sites and site clusters in the proposed National Heritage Area not included here (contains sensitive information).

Cordova in Tucson, as well as the Arizona Historical Society Museum on Second Street. Local residents and visitors who want to learn about ranching history in this region can visit the Empire Ranch Western Heritage Site in the Empire-Cienega Valley, the Ranchers' Heritage Center in Nogales, and La Posta Quemada Ranch Museum. Planning has also begun for interpretive displays about ranching at Pima County's Canoa Ranch. The agricultural history of the Santa Cruz Valley will be a focus of the planned Marana Heritage Park. United States military history in the Santa Cruz Valley is highlighted at the Fort Lowell Museum and the Museum of the Horse Soldier in Tucson. The history of aviation is the theme of the internationally famous Pima Air and Space Museum. Local transportation history is featured in Tucson at the Southern Arizona Transportation Museum and Old Pueblo Trolley, which describes itself as a "mobile transportation museum." A number of smaller museums, such as the Afro-American Heritage Center in Tucson, emphasize the local histories of specific cultures and ethnic groups.

Archaeological, Historical, and Cultural Museums in the Proposed National Heritage Area

- ◆ Afro-American Heritage Museum, Tucson
- ◆ Arizona Historical Society, Downtown Museum, Tucson
- ◆ Arizona Historical Society, Second Street Museum, Tucson
- ◆ Arizona Ranger Museum, Nogales
- ◆ Arizona State Museum, Tucson
- ◆ Conley Museum of the West, Tucson
- ◆ Empire Ranch Western Heritage Site and Educational Center, Las Cienegas National Conservation Area
- ◆ Fort Lowell Museum, Tucson
- ◆ History of Pharmacy Museum, Tucson
- ◆ Kentucky Camp, Santa Rita Ranger District, Coronado National Forest
- ◆ La Casa Cordova, Tucson
- ◆ La Posta Quemada Ranch Museum, Colossal Cave Mountain Park, Pima County
- ◆ Marana Heritage Park, Marana
- ◆ Museum of the Horse Soldier, Tucson
- ◆ Old Pueblo Trolley, Tucson
- ◆ Old West Movie Poster Museum, Flamingo Hotel, Tucson
- ◆ Pima Air and Space Museum, Tucson
- ◆ Pimeria Alta Historical Society, Nogales
- ◆ Postal History Museum, Tucson
- ◆ Ranch Museum, Santa Cruz Chili and Spice Company, Tumacácori
- ◆ Santa Cruz County Cowbells Ranchers' Heritage Center, Nogales
- ◆ Southern Arizona Transportation Museum, Tucson
- ◆ Sosa-Carrillo-Frémont House, Tucson
- ◆ Titan Missile Museum, Sahuarita
- ◆ Tubac Presidio State Historic Park
- ◆ Tucson Museum of Art and Historic Block, Tucson
- ◆ Tucson Origins Heritage Park, Tucson
- ◆ Tucson Rodeo Parade Museum, Tucson
- ◆ Tumacácori National Historical Park



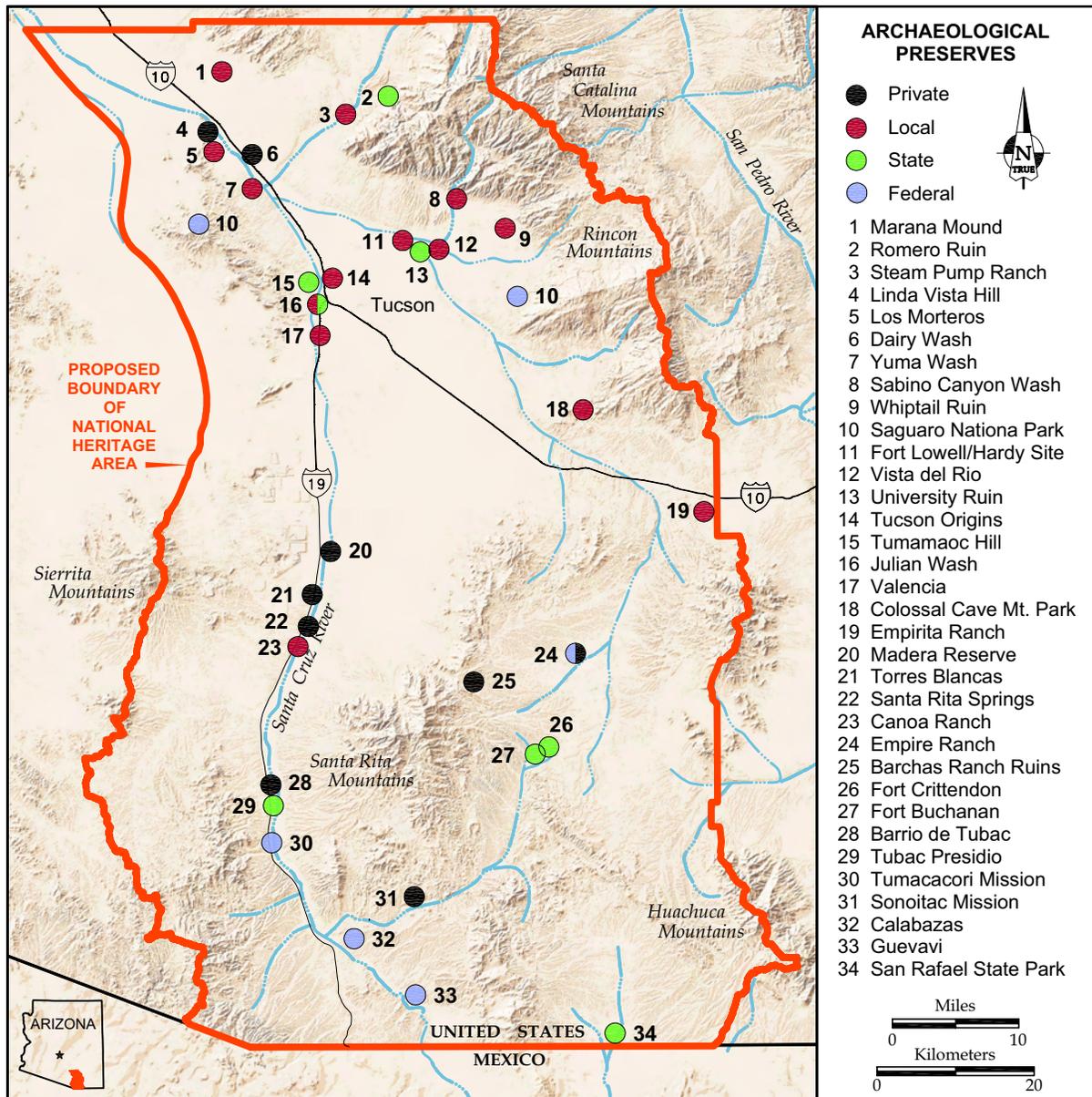
Relative potentials for preservation of archaeological sites in the proposed National Heritage Area.

Archaeological and Historical Parks and Preserves

Remains of prehistoric cultures, standing historic buildings, and historical archaeological sites representing different periods, cultures, and styles are preserved and interpreted for the public at 40 archaeological and historical parks and preserves in the proposed Santa Cruz Valley National Heritage Area. A local variant of the Hohokam culture that flourished in this valley between A.D. 550 and 1450 is interpreted at Romero Ruin in Catalina State Park and at the Hardy site in Fort Lowell Park. Several additional parks that will interpret the prehistoric heritage of this region are currently under development, including the Tucson Origins Heritage Park, the Marana Heritage Park, the Julian Wash Natural and Cultural Resources Park, the Los Morteros site, the Yuma Wash site, and the Vista del Rio Cultural Resources Park. Important Spanish colonial archaeological sites are interpreted at Barrio de Tubac Archaeological Preserve, Tumacácori National Historical Park, and Tubac Presidio State Historic Park, and will be the focus of interpretation at the planned Tucson Origins Heritage Park. The public can learn about United States military history in this region at Fort Lowell Park. Ranching history and traditions in the Santa Cruz Valley will be highlighted for the public at several parks and preserves under development, including Bojórquez-Aguirre Ranch, Canoa Ranch, Empire Ranch, and San Rafael State Park. There are also potentials for public interpretation of important prehistoric and historical archaeological sites at Tumamoc Hill National Historic Landmark, the Nature Conservancy Patagonia-Sonoita Creek Preserve, and Roy P. Drachman Agua Caliente Park.

Archaeological and Historical Parks and Preserves in the Proposed National Heritage Area

- ◆ Agua Caliente Ranch, Roy P. Drachman Agua Caliente Park, Pima County
- ◆ Barchas Ranch Ruin, Pima County
- ◆ Barrio de Tubac Archaeological Preserve, Tubac
- ◆ Bojórquez-Aguirre Ranch, Marana
- ◆ Calabazas, Tumacácori National Historical Park
- ◆ Canoa Ranch, Pima County
- ◆ Colossal Cave Mountain Park, Pima County
- ◆ Dairy Site, Marana
- ◆ Empire Ranch, Las Cienegas National Conservation Area
- ◆ Empirita Ranch, Pima County
- ◆ Fort Buchanan, Santa Cruz County
- ◆ Fort Crittenden, Santa Cruz County
- ◆ Fort Lowell/Hardy site, Fort Lowell Park, Tucson
- ◆ Guevavi Mission, Tumacácori National Historical Park
- ◆ Julian Wash Natural and Cultural Resources Park, Tucson
- ◆ Kentucky Camp, Santa Rita Ranger District, Coronado National Forest
- ◆ Los Morteros, Pima County
- ◆ Madera Reserve, Green Valley
- ◆ Marana Mound, Marana
- ◆ Marana Heritage Park, Marana (under development)
- ◆ Romero Ruin, Catalina State Park
- ◆ Sabino Canyon Ruin, Pima County
- ◆ Saguaro National Park East
- ◆ Saguaro National Park West
- ◆ San Agustín Mission/Clearwater Site, Tucson Origins Heritage Park



Archaeological and historical parks and preserves in the proposed National Heritage Area.

- ◆ San Rafael State Park
- ◆ Santa Rita Springs, Green Valley
- ◆ Sonoitac Mission, Patagonia-Sonoita Creek Preserve
- ◆ Steam Pump Ranch, Oro Valley
- ◆ Titan Missile Silo National Historic Landmark, Green Valley
- ◆ Torres Blancas, Green Valley
- ◆ Tubac Presidio State Historic Park
- ◆ Tucson Origins Heritage Park, Tucson (under development)
- ◆ Tumacacori Mission, Tumacacori National Historical Park
- ◆ Tumamoc Hill National Historic Landmark
- ◆ University Ruin, Tucson

- ◆ Valencia site, Pima County
- ◆ Vista del Rio Cultural Resources Park, Tucson
- ◆ Whiptail Ruin, Roy P. Drachman Agua Caliente Park, Pima County
- ◆ Yuma Wash site, Marana

Annual Heritage and Cultural Events

The rich and diverse cultural traditions of the Santa Cruz Valley are celebrated in 40 annual heritage and cultural events. Native American heritage is showcased during several powwows and craft fairs, the Ha:san Bak Saguaro Harvest Festival, the Waila Music Festival, and the Yaqui Easter Ceremonies. Spanish colonial heritage is recognized during the Anza Days Cultural Celebration, which includes a horseback ride from Tumacácori to Tucson, with riders in period clothes reenacting the Anza expedition of 1775; La Fiesta de San Agustín; La Fiesta de Tumacácori; the Tumacácori High Mass; and the Tucson Birthday Celebration. There are also a large number of festivals celebrating Mexican holidays, musical and dancing styles, foods, and arts, including Cinco de Mayo fiestas in several communities, the Día de San Juan Festival, the Día de los Muertos Parade, the Folklorico Festival Extravaganza, the International Mariachi Conference and other mariachi festivals, La Fiesta de los Chiles, the Norteño Music Festival, and the Puro Mexico Tucson Film Festival. Ranching and cowboy heritage is celebrated during the Empire Ranch Fall Roundup and Spring Trail Ride, the Fiesta de Los Vaqueros Rodeo and Parade, the Sonoita Rodeo, the Tucson Cowboy Music Roundup, and Trail Dust Days. Several cultural festivals, such as Tucson Meet Yourself, the Patagonia Fall Festival, and the Tubac Festival of the Arts, emphasize the cultural diversity of this region.

Annual Heritage and Cultural Events in the Proposed National Heritage Area

- ◆ American Indian Heritage Powwow and Craft Market, Tucson
- ◆ Anza Days Cultural Celebration, Tubac Presidio State Historic Park
- ◆ Arizona Archaeology Month, local events (March)
- ◆ Cinco de Mayo Celebrations, Nogales and Tucson
- ◆ Davis-Monthan Air Show, Tucson
- ◆ Dia de Los Muertos Parade, Tucson
- ◆ Dia de San Juan Festival, Tucson
- ◆ Dillinger Days Street Festival, Tucson (January)
- ◆ Empire Ranch Fall Roundup Open House and Western Art Show (September)
- ◆ Empire Ranch Spring Trail Ride (May)
- ◆ Fiesta de Los Vaqueros Rodeo and Parade, Tucson (February)
- ◆ Fiesta Grande, Tucson
- ◆ Fiesta Navidad, Tubac
- ◆ Folklorico Festival Extravaganza, Tucson
- ◆ Ha:san Bak, Saguaro Harvest Festival, Colossal Cave Mountain Park
- ◆ International Mariachi Conference and Fiesta de Garibaldi, Tucson
- ◆ La Fiesta de Los Chiles, Tucson Botanical Garden
- ◆ La Fiesta de San Agustín, Tucson
- ◆ La Fiesta de Tumacácori, Tumacácori National Historical Park
- ◆ La Reunion del Fuerte, Fort Lowell Park, Tucson
- ◆ Luminaria Nights, Tubac and Tucson Botanical Garden
- ◆ Mariachi Festivals, Nogales and Patagonia Lake State Park

- ◆ Norteño Music Festival, South Tucson
- ◆ Patagonia Fall Festival, Patagonia
- ◆ Puro Mexico: Tucson Film Festival (November)
- ◆ Rillito Downs Horse Races (January)
- ◆ Sonoita Quarterhorse Races
- ◆ Sonoita Rodeo, Sonoita (September, Labor Day weekend)
- ◆ Southwest Indian Art Fair, Tucson
- ◆ “The Empire 100” Western Art Show and Sale (January-February)
- ◆ Tubac Festival of the Arts
- ◆ Tucson American Indian Arts and Crafts Event (January)
- ◆ Tucson Birthday Celebration (August)
- ◆ Tucson Cowboy Music Roundup
- ◆ Tucson Meet Yourself
- ◆ Tumacacori Historic High Mass, Tumacacori National Historical Park
- ◆ Trail Dust Days, Tucson
- ◆ Waila Festival, Tucson
- ◆ Wa:k Powwow, San Xavier District, Tohono O’odham Nation
- ◆ Yaqui Easter Ceremonies, Old Pascua, Tucson

Historic Lodgings

In addition to destinations and annual events, visitors can experience local cultural and architectural traditions in more than 30 historic guest ranches, inns, lodges, bed and breakfasts, and hotels in the proposed Santa Cruz Valley National Heritage Area. Many guest ranches are working ranches in operation since the late 1800s, and a number of bed and breakfasts are in adobe houses more than 100 years old. Several lodges and hotels were built during the early twentieth century when the region first became a resort and health destination. Many of these heritage lodgings have been restored to their original appearance and decorated with period furnishings, arts, and crafts, allowing visitors to feel as if they have stepped back to earlier times and cultures.

Historic Lodgings in the Proposed National Heritage Area (Partial List)

- ◆ Adobe Hideout B&B, Tucson
- ◆ Adobe Rose Inn, Tucson
- ◆ Arizona Inn, Tucson
- ◆ Bellota Ranch, Tucson
- ◆ Canyon Ranch Health Resort, Tucson
- ◆ Catalina Park Inn Bed and Breakfast, Tucson
- ◆ Circle Z Ranch, Patagonia
- ◆ Corona Ranch, Tucson
- ◆ Crown C Guest Ranch Retreat, Sonoita
- ◆ Dos Marias Bed and Breakfast, Nogales
- ◆ Elysian Grove Market Bed and Breakfast Inn, Tucson
- ◆ Flying V Ranch, Tucson
- ◆ Ghost Ranch Lodge, Tucson
- ◆ Hacienda Corona de Guevavi Bed and Breakfast, Santa Cruz County
- ◆ Hacienda del Sol Guest Ranch Resort, Tucson

- ◆ Hotel Congress, Tucson
- ◆ Kentucky Camp (bed and no breakfast), Santa Rita Ranger District, Coronado National Forest
- ◆ La Posada del Valle Bed and Breakfast, Tucson
- ◆ Lazy K Bar Guest Ranch, Tucson
- ◆ Lodge on the Desert, Tucson
- ◆ Rainbow's End Bed and Breakfast, Sonoita
- ◆ Rex Ranch Resort, Amado
- ◆ Royal Elizabeth Bed and Breakfast Inn, Tucson
- ◆ Sam Hughes Inn, Tucson
- ◆ Santa Rita Hotel, Tucson
- ◆ Tanque Verde Guest Ranch, Pima County
- ◆ The Adobe Guesthouse, Tucson
- ◆ The Congenial Quail Bed and Breakfast, Tucson
- ◆ Tubac Golf Resort
- ◆ Wild Horse Ranch, Tucson
- ◆ White Stallion Ranch, Tucson

Heritage Societies, Associations, and Nonprofits

Thirty-three heritage organizations are working to preserve and increase recognition of the history, cultural traditions, historic architecture, and archaeological sites in the Santa Cruz Valley. Some of these organizations have been active for a long time, such as the Arizona Historical Society (formerly the Arizona Pioneer Historical Society) founded in 1864, the Arizona Archaeological and Historical Society (1914), the Tucson Corral of the Westerners (1944), and the Pimería Alta Historical Society (1948). Some organizations are groups of descendants of early pioneers and residents of this region, such as Los Descendientes del Presidio de Tucson, La Pilita Association, the Jewish Historical Society of Southern Arizona, and the Tucson Chinese Historical Society. Several groups specialize in ranching history and restoration of ranch buildings, such as the Empire Ranch Foundation, Friends of Canoa Ranch, and the Santa Cruz County Cowbells. The Southern Arizona Guides Association and the Southwest Mission Research Center give regional tours of historic sites. Living history exhibits and reenactments of historical events are performed regularly by the Anza Trail Coalition, Los Tubaqueños, the Tucson Presidio Trust, and the Western Buffalo Soldiers Association.

Heritage Societies, Associations, and Nonprofits in the Proposed National Heritage Area

- ◆ Adobe Corral of the Westerners, Tucson
- ◆ Anza Trail Coalition of Arizona
- ◆ Arizona Archaeological and Historical Society, Tucson
- ◆ Arizona Historical Society, Southern Arizona Chapter
- ◆ Arizona Rangers: Santa Cruz, Sonoita, and Tucson Companies
- ◆ Center for Desert Archaeology, Tucson
- ◆ Centro Cultural de Las Americas
- ◆ Coronado National Forest Heritage Society
- ◆ Empire Ranch Foundation
- ◆ Friends of Agua Caliente

- ◆ Friends of Canoa Ranch
- ◆ Friends of Kentucky Camp
- ◆ Friends of the 1904 Courthouse, Nogales
- ◆ Jewish Historical Society of Southern Arizona, Tucson
- ◆ La Pilita Association, Barrio Historico, Tucson
- ◆ Las Adelitas, Green Valley
- ◆ Los Descendientes del Presidio de Tucsón, Tucson
- ◆ Los Tubaqueños, Tubac
- ◆ Old Pueblo Archaeology Center, Marana
- ◆ Old Pueblo Trolley, Inc., Tucson
- ◆ Patronato San Xavier
- ◆ Pimería Alta Historical Society, Nogales
- ◆ Santa Cruz Cowbells, Santa Cruz County
- ◆ Southern Arizona Guides Association
- ◆ Southwest Folklore Center
- ◆ Southwest Mission Research Center
- ◆ Southwest Parks and Monuments Association, Oro Valley
- ◆ Statistical Research Foundation
- ◆ Tubac Historical Society, Tubac
- ◆ Tucson Chinese Historical Society
- ◆ Tucson Presidio Trust for Historic Preservation, Tucson
- ◆ Tucson Corral of the Westerners, Tucson
- ◆ Western Buffalo Soldiers Association, Inc., Tucson

Traditional Crafts, Music Styles, Foods, Crops, and Livestock Breeds

The Santa Cruz Valley has a number of regionally distinctive types of crafts, music styles, foods, farm and ranch products, and livestock breeds associated with Native American, Mexican, and American cultural traditions. Rooted in history, they are expressions of cultural and regional pride. They are some of the things that make this region special, cultivated and enjoyed by residents, and appreciated and sought by visitors.

Local Crafts

Locally produced Native American crafts include Tohono O'odham baskets, made from either wild plant fibers or steel wire, and Yaqui carved and painted wood masks used in traditional Easter ceremonies. Mexican-American blacksmiths keep alive the craft of hand-forged, wrought iron gates, window screens, fences, railings, and furniture. Several local shops make custom and "Mission-style" furniture out of native mesquite hardwood, and display them in galleries and sell them over the internet. Custom Western saddles, boots, and belts are produced by several renowned leatherworkers. Locally made piñatas and cascarones (wooden wands with decorated eggshells containing confetti) are popular items for traditional Mexican holidays and fiestas. Several traditional construction materials and techniques used by some local builders can also be considered to be crafts, including adobe architecture, a waterproof plaster made from a mixture of crushed lime and cactus juice, shade structures (ramadas or wa:atos) made from mesquite logs and saguaro ribs, and living fences made of ocotillo plants.

Locally Produced Crafts in the Proposed National Heritage Area

- ◆ Tohono O'odham baskets
- ◆ Yaqui masks
- ◆ Wrought iron
- ◆ Mesquite furniture
- ◆ Western saddles and boots
- ◆ Mexican fiesta supplies (piñatas, cascarones)
- ◆ Local construction techniques and materials (adobe, lime and cactus-juice plaster, mesquite and saguaro-rib ramadas, ocotillo fences)

Local Foods, Farm, and Ranch Products, and Livestock Breeds

In terms of both acres under production and value, cotton is the most important crop grown in the region. Extensive orchards near Green Valley are the leading source of pecans in Arizona. Red and white wines are manufactured and bottled by several wineries near Sonoita, Elgin, and Nogales, where the climate and soils match those of Mediterranean countries. Among the varieties grown in local vineyards is the Mission grape, introduced during the Spanish period. The region produces a unique dark honey made from the nectars of mesquite blossoms and native wildflowers. Jellies, syrups, and candies produced from cactus fruits are popular with tourists.

Several traditional Native American foods are cultivated or gathered. Chiltepin, the wild chile plant that is the ancestor of domesticated chile varieties, grows wild in the canyons near Tumacácori (a Native American name meaning "where the wild chiles are gathered") and is also cultivated as a fiery condiment. Other native crops include tepary beans; several types of squashes; a fast-growing, drought-resistant variety of corn; and "devil's claw," the fibers of which are used to make baskets. Wild plant foods gathered from the desert include seed pods of mesquite trees, wild greens, and cactus fruits, buds, and pads.

Figs, apples, pomegranates, grapes, and other fruit stocks introduced during the Spanish period continue to be grown in private gardens and orchards throughout the region, and are currently being inventoried in preparation for re-establishing historic orchards and for commercial sale in plant nurseries. Dried and ground chiles, cumin, oregano, and other Mexican spices are locally produced and packaged.

Cattle ranching has been the major rural land use for more than 300 years. While most ranches raise cattle to ship to feedlots in other states, some local ranches butcher their own beef, and others specialize in certain breeds of horses and ponies. Grass-fed, organic beef (raised on native forage, and using no hormones or antibiotics) is increasing in importance. The region is famous for breeding quarterhorses for racing and rodeo competition. Some conservation breeders raise the Wilbur-Cruce Mission strain of colonial Spanish horses, called Spanish Barbs, descended from horses introduced to the region by missionaries and ranchers during the late 1600s.

Locally Produced Foods, Agricultural Products, and Livestock Breeds in the Proposed National Heritage Area

- ◆ Cotton
- ◆ Wine
- ◆ Pecans
- ◆ Mesquite honey
- ◆ Cactus fruit products (jellies, syrups, and candies)
- ◆ Wild chiles (chiltepinas)
- ◆ Native crops (Tohono O'odham corn, squashes, tepary bean, devil's claw)
- ◆ Native wild foods (mesquite pods, foods from cacti, wild greens)
- ◆ Spanish Colonial fruits (figs, apples, pomegranates, quinces, grapes)
- ◆ Mexican spices
- ◆ Range-fed, organic beef
- ◆ Quarterhorses
- ◆ Spanish Barb horses

Farmers Markets in the Proposed National Heritage Area

- ◆ Community Food Bank Farmers' Market, Tucson, Saturdays and Tuesdays, 8:00 a.m.-12:00 p.m.
- ◆ Downtown Farmers' Market and Arts and Crafts Mercado, Tucson, Wednesdays, 8:00 a.m.-1:00 p.m.
- ◆ Fresh Fridays, Tucson, El Con Mall, Tucson, Fridays, 1:00 p.m.-5:00 p.m.
- ◆ Horse Country Farmers' Market, Tucson, Saturdays and Sundays, 10:00 a.m.-4:30 p.m.
- ◆ Main Gate Square Sunday Farmers' Market, Tucson, first Sunday of each month, 10:00 a.m.-2:00 p.m.
- ◆ Oro Valley Farmers' Market, Oro Valley, Saturdays, 8:00 a.m.-12:00 p.m.
- ◆ Plaza Palomino Saturday Market, Tucson, Saturdays, 9:00 a.m.-1:00 p.m.
- ◆ Rincon Valley Farmers' Market, Pima County, Saturdays, 8:00 a.m.-1:00 p.m.
- ◆ Sonoita Growers' Market, Saturdays, 9:00 a.m.-12:00 p.m., May-August
- ◆ St. Phillip's Plaza Farmers' Market, Tucson, Sundays, 8:00 a.m.-1:00 p.m.

Pick-Your-Own Farms in the Proposed National Heritage Area

- ◆ Agua Linda Farm, Amado
- ◆ Douglas Apple Orchard, Elgin
- ◆ Forever Yong Farm, Amado
- ◆ Howard's Orchard, Catalina

Wineries in the Proposed National Heritage Area

- ◆ Arizona Vineyards
- ◆ Callaghan Vineyards, Sonoita

- ◆ Charron Vineyard, Vail
- ◆ Dark Mountain Winery, Vail
- ◆ Sonoita Vineyards, Sonoita
- ◆ Village of Elgin Winery, Elgin

Research and Conservation Farms in the Proposed National Heritage Area

- ◆ Campus Agricultural Center, University of Arizona, Tucson
- ◆ Marana Agricultural Center, University of Arizona, Marana
- ◆ Native Seeds/SEARCH Conservation Farm, Patagonia
- ◆ San Xavier District Farmers Co-op
- ◆ Santa Rita Experimental Range, University of Arizona, Pima County
- ◆ West Campus Agricultural Center, University of Arizona, Tucson

Annual Planting and Harvest Festivals in the Proposed National Heritage Area

- ◆ Autumn Harvest Festival, Tucson
- ◆ Blessing of the Seeds, Native Seeds/SEARCH Conservation Farm, Patagonia
- ◆ Blessing of the Vineyards Festival, Elgin
- ◆ Blessing of the Harvest Festival, Elgin

Local Traditional Music Styles

There are several traditional styles of music in the Santa Cruz Valley, and some can be heard in few other places. These are the sounds of the United States-Mexico borderlands and the American Southwest, and they are played on local radio stations, at annual festivals, at family celebrations, and in backyards. They celebrate the Native American, Mexican, and American heritages of the people who live here, and remind visitors they are definitely not in anywhere U.S.A. This regional music is unique because it is grounded in local history and the blending of cultures that has occurred in the Santa Cruz Valley. Many of the styles draw on each other for inspiration and instrumentation. The multicultural history of the Santa Cruz Valley is reflected in this music.

The waila music of the Tohono O'odham, the native people of the Sonoran Desert, developed from the music of nineteenth century fiddle bands that adapted European and Mexican tunes heard in northern Sonora. Also called chicken scratch, waila music is only instrumental. The most traditional forms of waila are played with a fiddle, guitar, and drums, although some bands now include a button accordion, alto saxophone, and electric six-string and bass guitars. The dances performed to this music include the waila (similar to a polka), the chote (based on a folk dance from Scotland or Germany), and the mazurka (based on a Polish folk dance). Regardless of the beat, all waila dances move around the floor in a counterclockwise direction. The annual Waila Festival in Tucson is an opportunity to experience this distinctive music and its dances.

Mariachi music developed in western Mexico during the mid-nineteenth century, and was originally played at weddings. In the 1920s and 1930s, mariachi bands added cornets and then trumpets to the traditional violins, guitarras, vihuelas, and guitarrones. It became the most popular music in Mexico during the 1940s and 1950s, when it was spread by Mexican

radio and charro films. Mariachi bands can be heard at many Mexican restaurants, private parties, and annual festivals in the region, and young Mexican-Americans learn to play in youth bands such as Los Changuitos Feos, and in the University of Arizona Mariachi Program. The Mexican-American role in the development of this style is firmly rooted in Tucson, where local groups such as Mariachi Cobre popularized the style for United States Hispanic and non-Hispanic audiences alike. The importance of mariachi music in the region is reflected in the annual Tucson International Mariachi Conference and Fiesta de Garibaldi that bring together local artists with stars from Mexico and around the world.

Corridos are Spanish-derived ballads of northern Mexico that tell tales of the 1910 Mexican Revolution, the lives of heroes and outlaws, border crossings, horse races, disasters, and ill-fated loves. Corridos very often transmit important oral history. Corridos became popular on both sides of the border in the 1920s, when musicians added the accordion, introduced by German and Czech immigrants to northern Mexico, southern Texas, and southern Arizona in the late nineteenth century. Polkas, waltzes, chotiches, and mazurkas were introduced with the accordion. These mixed with corridos to form norteño music in the early 1950s. Traditional corridos are still composed and performed as a vital part of the cultural traditions of the region. An annual corrido composition contest in Tucson perpetuates the tradition among audiences young and old.

Norteño music (also known as conjunto) is a music style of the United States-Mexico borderlands based around the accordion, drums, bajo sexto (12-string guitar), and string bass; it often includes vocals. Modern groups also use the electric bass, alto saxophone, and keyboards. During the later twentieth century, norteño evolved with the influences of Columbian cumbia music, American rock music, and elements of brass bands (the latter called banda sinaloense). In the Santa Cruz Valley, norteño music can be heard on many radio stations and at the annual Norteño Festival in the City of South Tucson.

The dramatic ranchera style of music emerged during the 1910 Mexican Revolution. It is played at several different beats, and its lyrics traditionally celebrate rural life, tell of the struggles of ordinary people, and declare strong romantic feelings. Norteño bands favor rancheras with a polka beat, while mariachi bands play rancheras to the slower beats of boleros (Latin American romantic ballads) and waltzes. Ranchera music became popular on both sides of the border when it was featured in several American films in the 1950s.

On the United States side of the border, Mexican-Americans developed their own styles of folk music during the late nineteenth century, including ballads and orquesta music. During the 1940s, Tucson's Lalo Guerrero and other zootsuit-wearing pachucos fused swing jazz and boogie with rhumba and the slang of El Paso (caló) to create a unique Chicano sound played on radio stations and in dancehalls throughout the Southwest and in Los Angeles. Today, there are a number of Santa Cruz Valley-based, Mexican-American bands playing borderland styles of music.

In addition to these Native American, Mexican, and Mexican-American styles of music, several types of Western music can be heard. These range from late nineteenth century Western folk ballads and cowboy songs played on guitars, sometimes accompanied by vocal harmonies and yodeling, to Western swing, an upbeat and eclectic mix of country, blues, polka, and swing jazz played on the fiddle, string bass, drums, saxophone, piano, and pedal steel guitar. Originating in the dance halls, roadhouses, and county fairs of west Texas in the 1920s and

1930s, Western swing spread throughout the Southwest and gained a wide following through radio in the mid-1940s. The annual Tucson Cowboy Music Roundup features all of these types of Western music, and they can also be heard in local nightclubs and steakhouses, as well as at folk festivals throughout the region.

Local Traditional Music Styles in the Proposed National Heritage Area

- ◆ Waila
- ◆ Mariachi
- ◆ Corridos
- ◆ Norteño
- ◆ Ranchera
- ◆ Mexican-American folk music
- ◆ Chicano music
- ◆ Western folk ballads
- ◆ Cowboy songs
- ◆ Western swing



Chapter 4

INTERPRETIVE THEMES AND RELATED RESOURCES

THE HERITAGE OF A DESERT FRONTIER

The Santa Cruz Valley, with its long and complex cultural past, is blessed with a rich historic legacy in a unique natural environment – important historic and cultural places located along a desert river that flows through a culturally and environmentally diverse region. Here, Native American, Spanish Colonial, Mexican, and American Territorial heritages and traditions intersect with the natural landscape in ways unique to the American story. These remain very much a source of the identity and vitality of the region.

The predominant characteristics of the landscape, the underlying threads of both the natural history and human experience, and the distinctive stories this region has to tell are those of a desert frontier. For the last 8,500 years – after the climate changes that occurred during the time of its first inhabitants, the Paleoindian big-game hunters – this has been essentially a desert region. Here, the Sonoran cactus desertscrub meets the Chihuahuan desert grasslands, creating a strong contrast with remnants of Ice Age forests on the “Sky Island” mountain ranges that rise steeply above the desert floor.

This desert valley was a cultural frontier during much of prehistory. After being largely abandoned during a long interval of hotter and drier climate between 8,500 and 5,500 years ago, it was reoccupied by Archaic hunter-gatherers arriving from the north and the south as the climate became more like that of today. Between 4,000 and 2,000 years ago, this region was the northern frontier of Mesoamerican agriculture and early village culture. The local lifeway was transformed by the introduction of tropical crop plants, new food storage and processing technologies, and the social changes that came with living in larger groups in settled communities. Water control and pottery may have been local innovations, and native plants were domesticated and added to the mix of crops. From this frontier, farmers migrated to other parts of the Southwest, spreading the new way of life. Between 1,500 and 500 years ago, this valley was the boundary between the Hohokam culture that developed in the heart of the Sonoran Desert to the north, and the Trincheras culture that developed to the south. Seashells, obsidian, pottery, cultural practices, and ideas were exchanged along this valley corridor.

During the late seventeenth century, the Santa Cruz Valley became the northern frontier of the Spanish empire and the edge of European civilization in western North America. Spaniards established ranches on the upper Santa Cruz River by 1680, and during the 1690s, the Jesuit missionary Eusebio Francisco Kino explored the rest of the valley and single-handedly established a chain of missions and introduced European crops, livestock, architecture, and religion. Following Kino’s large footsteps were Spanish miners, soldiers, and colonists who built ranches, towns, and forts, and survived both native Piman revolts and Apache raids on this remote region of New Spain. After independence was won from Spain in 1821, this remained the northern frontier of Mexico. The missions were secularized or abandoned, and constant Apache attacks made it a dangerous place to live.

American trappers explored the area during the early eighteenth century, and the Santa Cruz Valley became the southwestern frontier of United States expansion after the region was purchased from Mexico in 1854. Gold and silver miners came first, followed by the United States Army and ranchers who built large cattle operations under its protection. This region was the westernmost front of the Civil War, as well as the front of the Apache campaigns of the 1870s and 1880s. This part of the Western frontier was not finally closed until the arrival of the railroad and subjugation of the Apaches in the early 1880s. During the early twentieth century, the Santa Cruz Valley was at the northern edge of the Mexican Revolution, with battles spilling across the border and requiring a buildup of United States troops to protect valley residents.

The present-day landscape of the Santa Cruz Valley has been shaped by long continuities in frontier livelihoods and institutions. It may be the longest continuously cultivated region in the United States, with an agricultural history extending back more than 4,000 years. Cattle ranching continues in a 300-year, unbroken link with Spanish, Mexican, and American pioneers. Active copper mines are surrounded by ghost towns left by earlier gold and silver mining booms. Prehistoric ruins, Spanish missions, Mexican streetscapes, and American forts are preserved, visited, studied, and celebrated. A vibrant United States-Mexico border culture interacts with contemporary American society and ancient Native American traditions.

The continuities of cultural traditions and land uses in this desert frontier region define the sense of place and contribute in a unique way to the fabric of America. This is still very much a working and a living landscape – home to Native Americans who view and use the land in traditional ways, home to descendants of Spanish settlers whose religious faith shaped the land and defined the cities, home to descendants of American pioneers whose courage brought them westward seeking new opportunities, and home to rural ranchers whose stewardship of the land serves to preserve this unique landscape for everyone.

This vast desert, shaped by generations of founding groups with diverse cultural origins, has also shaped its people and their relationship to the land. The ways in which successive cultures adjusted to the limiting conditions of this desert are significant chapters of the national biography, and have helped form the character of our country. Long a desert borderland, where cultures converged and emerged anew, the Santa Cruz Valley of southern Arizona has a heritage and a sense of place like no other, and it contributes uniquely to our nation's story. The themes presented here highlight some of the most important natural features and cultural continuities in the Santa Cruz Valley, this desert frontier of our American heritage.

THEME CENTERPIECES: DESIGNATED NATIONAL TREASURES

Among the natural and cultural wealth of the Santa Cruz Valley are several places that have been designated as nationally significant resources. **Saguaro National Park** and the **Desert Laboratory National Historic Landmark** preserve and study the plants and wildlife of the Sonoran Desert, and the **Sky Island Scenic Byway** in Coronado National Forest provides spectacular views of one of the globally unique mountain ranges of the United States-Mexico borderlands. The rarity and biological importance of flowing water in the desert have been recognized by the designations of **Las Cienegas National Conservation Area** and the **Patagonia-Sonoita Creek** and **Canelo Hills Cienega National Natural Landmarks**. The legacy of the Spanish Colonial and Mexican periods in the history and cultural development of the

Southwest are exemplified by **Tumacácori National Historical Park**, and the **San Xavier del Bac, Guevavi, and Calabazas National Historic Landmarks**. As one of the earliest missions established in the Southwest, San Xavier also represents an important part of the cultural history of Native Americans of this region.

The **Pennington** and **Binghampton National Rural Historic Landscapes** were designated to recognize the historical roots of American ranching and farming in the desert Southwest. The crucial defensive role served by this region during the Cold War is represented by the **Titan Missile Silo National Historic Landmark**. These nationally significant resources are centerpieces of the themes of the proposed Santa Cruz Valley National Heritage Area, and they are linked by those themes to related resources in the region that have national or local significance.

The 10 interpretive themes of the proposed Santa Cruz Valley National Heritage Area highlight significant aspects of the natural and cultural history of the region. These are the special stories of the region, and they are unique among existing National Heritage Areas. A criterion for selecting each theme is that, within the boundaries of the proposed National Heritage Area, there is an assemblage of related and publicly accessible resources with sufficient integrities to convey the theme. Each identified theme is described here, and its distinctiveness among the themes of existing National Heritage Areas is discussed, examples of related resources are listed, its suitability as a National Heritage Area theme is assessed, and suggestions for further reading are provided.

SKY ISLANDS AND DESERT SEAS

Summary of Theme

Southwestern New Mexico, southeastern Arizona, northwestern Chihuahua, and northeastern Sonora are a landscape of wonder, beauty, wildness, and astounding biological diversity. This is the Sky Island region, and the proposed National Heritage Area is its heart. The *Sky Islands and Desert Seas* theme highlights the globally unique landscape and extraordinary biological diversity of the proposed National Heritage Area. This landscape has provided the resources and opportunities for exceptional natural and cultural diversity in the region. The southwestern Sky Island archipelago is unique on the planet, and is the only Sky Island complex extending from subtropical-to-temperate latitudes, with a globally unprecedented array of plant and animal species of northern and southern origins. These mountain islands are among the most diverse ecosystems in North America due to their great topographic relief and location at the meeting point of major desert and forest biomes. These unique qualities result from several factors, including the wide range of elevations in the region, the convergence of the Sonoran and Chihuahuan deserts, the north-south trending mountain ranges that contain a mingling of species (many endemic) from the Rocky Mountains to the north and the Sierra Madre Occidental to the south, and two, distinct rainy seasons.

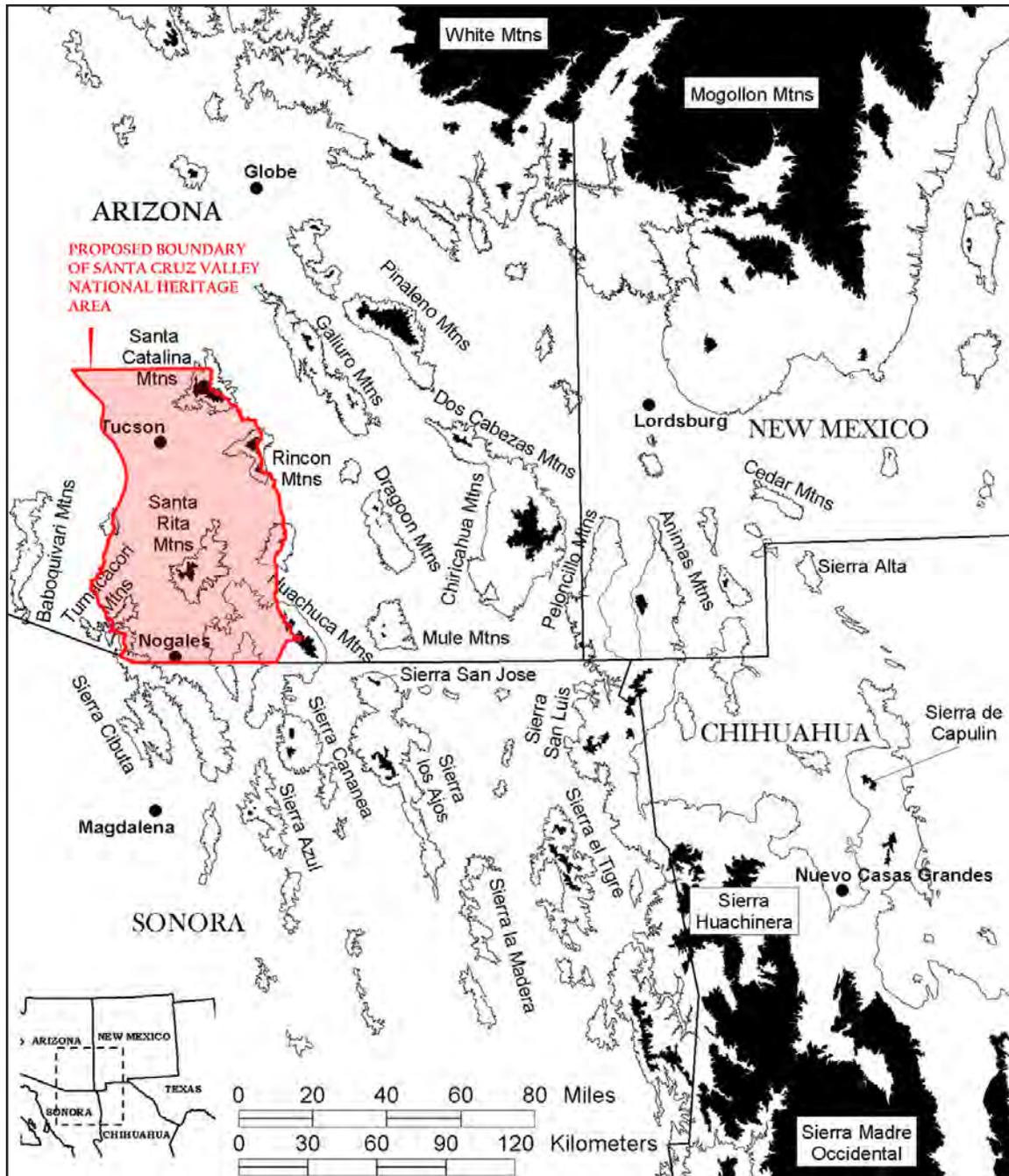
Description of Theme

Sky Islands are mountain ranges isolated from each other by intervening basins and valleys of desert and grassland, usually below 4,000 ft in elevation. The basins and valleys in this Basin and Range topographic province act as barriers to the movement of woodland and forest species at higher elevations, somewhat like the way saltwater seas isolate plants and animals on oceanic islands. The 40 ranges of the Sky Island system may be thought of as an archipelago connecting the continents of the Sierra Madre Mountain Range of northern Mexico to the south with the Rocky Mountains of the United States to the north.

Sky Islands are forested ranges that rise thousands of feet above seas of desert and grassland, like islands in the sky. They are typically over 5,000 ft in elevation and have oak forests at lower elevations, oak-pine forests at middle and higher elevations, and spruce-fir forests on the highest peaks. About 40 such mountain ranges occur in the Sky Island region, of which eight (Santa Catalina, 9,157 ft; Rincon, 8,666 ft; Santa Rita, 9,453 ft; Patagonia, 7,221 ft; Whetstone, 7,684 ft; Huachuca, 9,466 ft; Tumacácori, 5,634 ft; and Atascosa/Pajarito, 6,440 ft) occur in the proposed National Heritage Area.

At lower elevations, the western portion of the proposed National Heritage Area is in the Arizona Upland Subdivision of the Sonoran Desert Biome, while the eastern part is in the Desert Grassland Community. Higher elevations comprise the Madrean Evergreen Woodland Community: warm-temperate oak-pine communities with connections to the Sierra Madre Range in northern Mexico. These comprise the Sky Island, or Apache Highland communities.

The Santa Cruz Valley has two rainy seasons. From December to February, winter storms originating in the North Pacific bring gentle rain. From July to mid-September, the summer monsoon brings surges of wet tropical air and localized deluges in the form of violent



Map of the Sky Island region and location of the proposed National Heritage Area (copyright 2004 Cory Jones, Sky Island Alliance).

thunderstorms. Rain falls about equally in the two seasons and provides the region with an average of 12 inches annually, although this varies widely with elevation, as do temperatures.

To my mind these live oak-dotted hills fat with side oats grama, these pine-clad mesas spangled with flowers, these lazy trout streams burbling along under great sycamores and cottonwoods, come near to being the cream of creation. — Aldo Leopold, 1937

This mosaic of deserts, grasslands, and mountains is used for outdoor recreation (hiking, camping, rock climbing, skiing, summer homes, car-based tourism), extraction of natural resources (hunting, grazing, fuel-wood, mining), habitat use and scientific research (critical habitat for threatened and endangered species, scenic views, birdwatching, film making), preservation of prehistoric archaeological sites, and practice of traditional Native American ceremonies.

High Natural Diversity

High levels of natural diversity are expressed in several forms on the Sky Island landscape and represent some of the most important resources relevant to this theme. Biodiversity is the natural variety and variability among living organisms, the ecological complexes in which they naturally occur, and the ways in which they interact with each other and the natural environment. It includes three elements: ecosystem diversity, biotic community diversity, and species diversity.

Ecosystem diversity includes the variety of landscapes found together within any region, and the ways in which their biotic communities interact with a shared physical environment, in this case the Santa Cruz Valley watershed. Here, the high diversity is attributed to the variable landscape, interspersed with native desert and grassland vegetation, oasis-like cienegas and lakes, and riparian woodlands.

Biotic community diversity refers to the richness of plants and animals found together within any single landscape mosaic, such as the watershed. The numerous Sky Islands in the watershed demonstrate a gradient of communities as they rise from desert and grassland to xeric woodlands and coniferous forests.

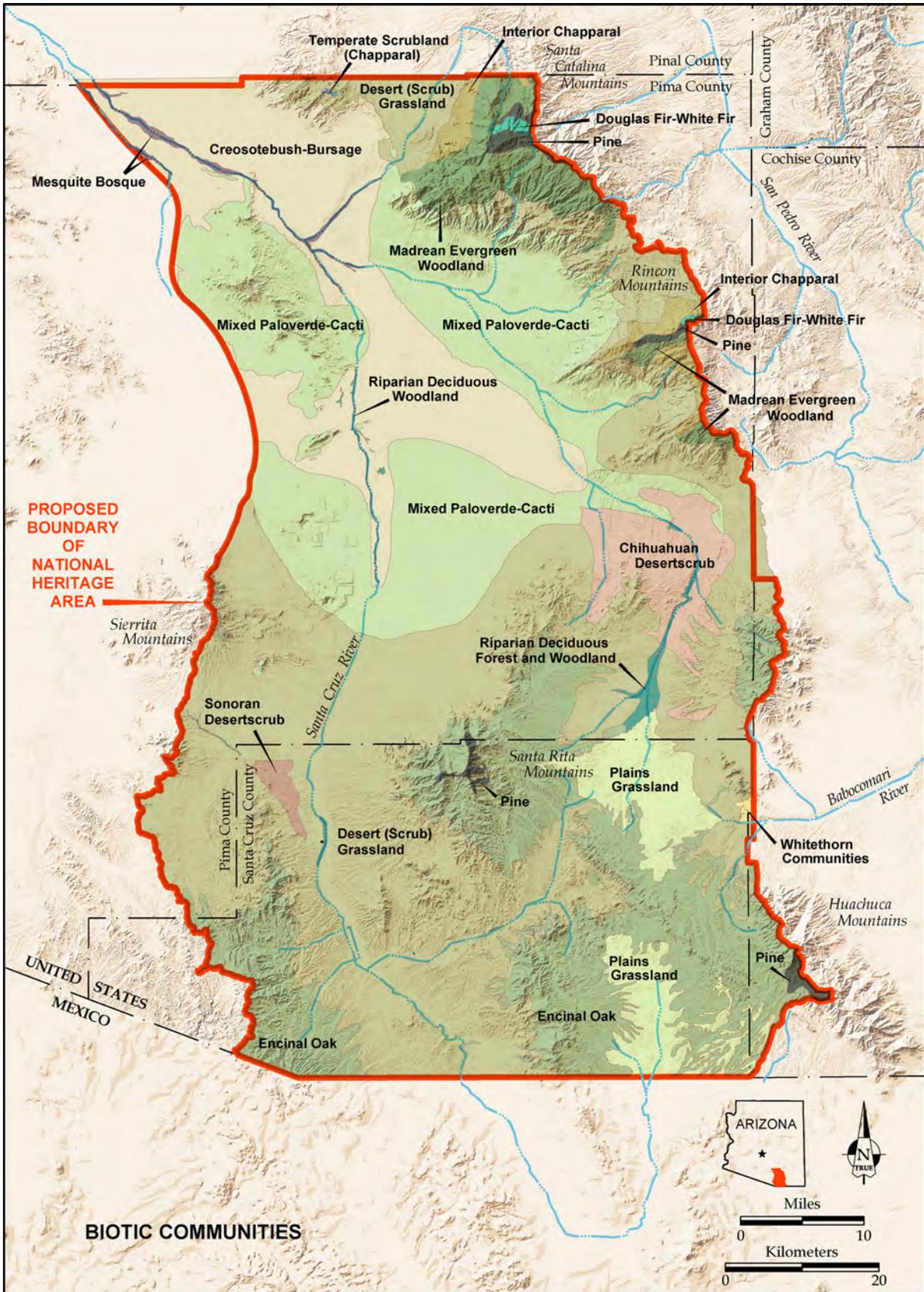
Species diversity encompasses the richness of living species in the area, made possible by the merging of four biomes (Neotropical Sierra Madre, temperate Rocky Mountain, and Sonoran and Chihuahuan deserts), an extreme three-dimensional landscape, and two rainy seasons. Species diversity is constantly changing and must be tracked by continued monitoring programs. Although each species plays a vital role in its community, some have attained special status. For example, the flower of the protected saguaro cactus is the state flower, while the ironwood tree—now protected in Ironwood National Monument—is regarded as the tree of life for the Sonoran Desert.

These and other components of biodiversity ensure some form of ecosystem stability to inhabitants of the watershed. When a mosaic of biotic communities occurs together and are environmentally healthy in a large landscape—as occurs in the proposed National Heritage Area—fewer species will succumb to endangerment or extinction.

Sensitive and Unique Species in the Sky Islands of the Proposed National Heritage Area

Plants (common name)

- ◆ Agave
- ◆ Wild onion
- ◆ Aster
- ◆ Milk-vetch
- ◆ Zorillo



The diverse biotic communities located in the proposed National Heritage Area.

- ◆ Climbing milkweed
- ◆ Fleabane
- ◆ Lemon lily
- ◆ Huachuca water umbel
- ◆ Dock sorrel
- ◆ Groundsel
- ◆ Sophora
- ◆ Kearney's blue star
- ◆ Canelo Hills ladies tresses

Animals (common name)

- ◆ Fish
 - ❖ Sonora chub
 - ❖ Gila chub
 - ❖ Gila topminnow
 - ❖ Desert pupfish

- ◆ Amphibians
 - ❖ Barking frog
 - ❖ Tarahumara frog
 - ❖ Chirichua leopard frog
 - ❖ Mountain tree frog
 - ❖ Narrow-mouthed toad
 - ❖ Sonoran green toad
 - ❖ Sonoran tiger salamander

- ◆ Reptiles
 - ❖ Mexican garter snake
 - ❖ Ridge-nosed snake
 - ❖ Tucson shovel-nosed snake
 - ❖ Mexican vine snake
 - ❖ Green rat snake
 - ❖ All montane rattlesnakes

- ◆ Birds
 - ❖ Buff-breasted flycatcher
 - ❖ Southwest willow flycatcher
 - ❖ Gray hawk
 - ❖ Black hawk
 - ❖ Yellow-billed cuckoo
 - ❖ Mexican spotted owl
 - ❖ Northern goshawk
 - ❖ Peregrine falcon

- ◆ Mammals
 - ❖ Lesser long-nosed bat
 - ❖ Mexican long-tongued bat
 - ❖ Arizona shrew
 - ❖ Mesquite mouse

- ❖ Jaguar
- ❖ Mexican gray wolf
- ❖ Desert bighorn sheep

Recent biological inventories of vascular plants and vertebrates at Tumacácori National Historical Park (Table 4.1.) and Saguaro National Park (Table 4.2) give an idea of the extraordinary biological diversity at these sites. Note that there was no survey for bats at Tumacácori National Historical Park or fish at Saguaro National Park, and that results from Saguaro National Park are preliminary. These inventories were conducted by the Sonoran Desert Network, a joint research collaboration of the University of Arizona (School of Natural Resources) and the United States Geological Survey (Sonoran Desert Research Station), and were funded by the National Park Service between 2000 and 2003.

Table 4.1. Observed biodiversity in Tumacácori National Historical Park (2000 to 2003).

Taxon	Tumacácori (132 ha)	Calabazas (9 ha)	Guevavi (3 ha)
Plants	302	179	152
Fish	8	-	-
Amphibians	7	2	2
Reptiles	15	11	7
Birds	129	80	74
Mammals	26	15	10
Totals	487	287	245

Table 4.2. Observed biodiversity in Saguaro National Park (2001 and 2002).

Taxon	Rincon Mountains (27,186 ha)	Tucson Mountains (9,710 ha)
Plants	539	177
Amphibians	8	4
Reptiles	38	31
Birds	175	71
Mammals	35	20
Totals	795	303

The high natural diversity in the Santa Cruz watershed is most visible to residents and visitors as a spectrum of distinct life zones at different elevations. The elevational extremes in the region extend from about 2,000 ft above sea level at Marana, to 9,453 ft at the top of Mount Wrightson in the Santa Rita Mountains. Depending on the elevation of the Sky Islands, each will have two to five life zones, with distinct plant communities providing different foods for animals and lower temperatures at higher elevations. Thus, each Sky Island has a unique ecosystem with a stack of life zones, ranging from arid at the bottom to potentially boreal at the top. Many species migrate vertically to feed and breed at different elevations. Further, life zones occur at lower elevations on the northern faces of Sky Islands and higher elevations on their southern faces. As an example, in the Huachuca Mountains, the grassland zone occurs up to approximately 4,500 ft, the encinal (oak woodlands) zone to about 6,000 ft, the pine-oak

woodland zone to about 7,500 ft, the pine forest to roughly 9,500 ft, and the fir forest from 8,000 to 9,500 ft (only on the northern face).

Natural Core Areas

Large expanses of land in the proposed National Heritage Area are managed for the conservation of natural conditions by public agencies such as the National Park Service, the National Forest Service, and the Bureau of Land Management, or by conservation organizations such as The Nature Conservancy. In a number of parks and preserves located in core natural areas, extractive uses of natural resources are prohibited, and ecological and evolutionary processes are maintained. These areas are important for focal species such as Mexican gray wolves, jaguars, mountain lions, black bears, and northern goshawks, while providing an umbrella effect for protecting many other species in the same habitats.

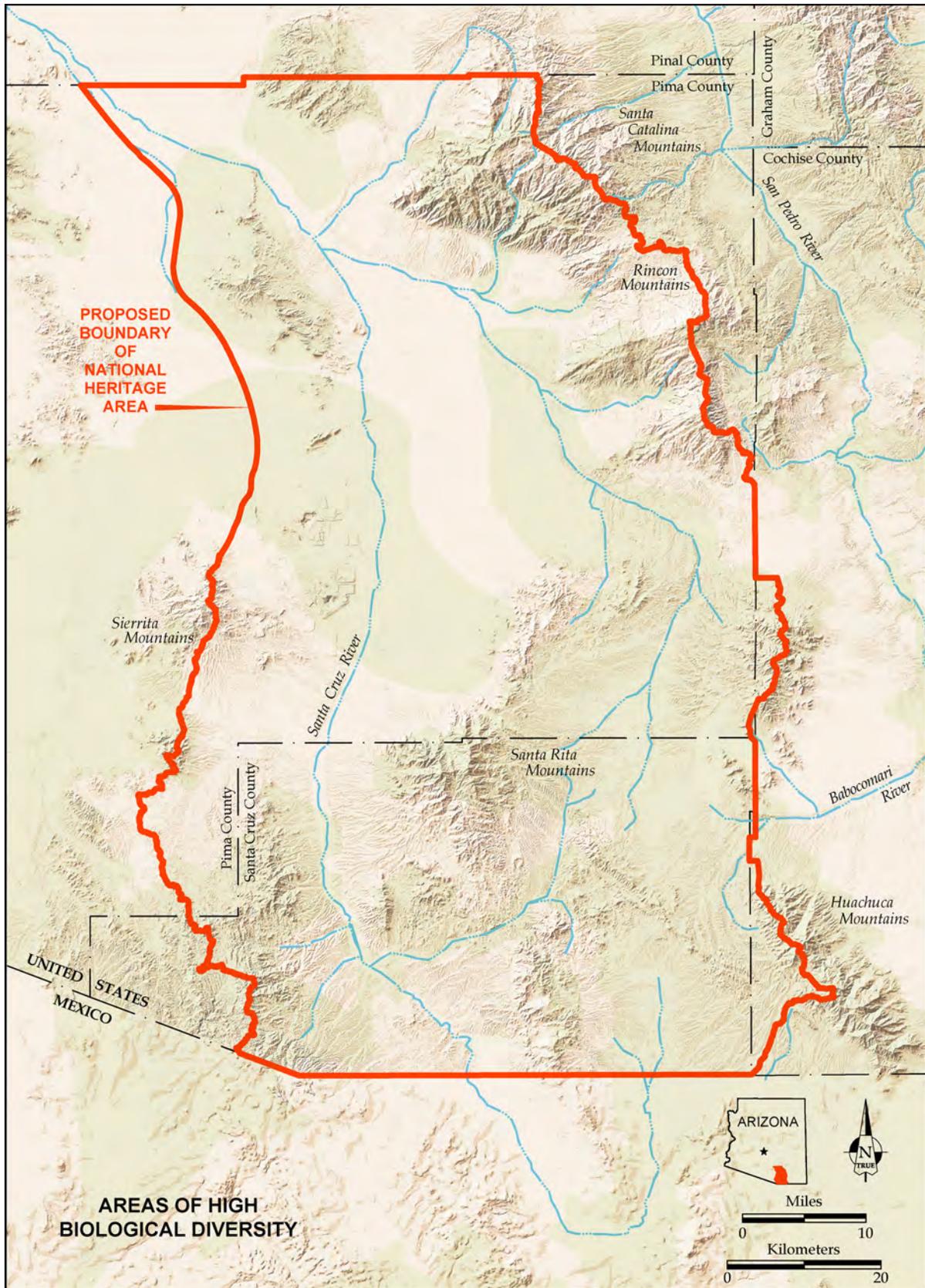
The Arizona Nature Conservancy has developed a plan of Portfolio Conservation Sites identified in terms of eco-regions and biological diversity. Of the 147 regions with high biological diversity identified in the State of Arizona, nine occur within the proposed National Heritage Area, including number one on their list – the Huachuca Mountains Grassland Valley Complex, which covers about 35 percent of the proposed National Heritage Area and extends into Sonora, Mexico (Table 4.3). This area has the highest biological diversity in Arizona.

Table 4.3. Endemic and threatened species in Arizona Nature Conservancy Natural Core Areas in the proposed National Heritage Area.

Portfolio Conservation Area	Endemic Species	Endangered/ Threatened Species	State Rank (147 Total)
Huachuca Mountains Grassland Valley Complex	36	14	1
Atascosa/Pajarito Mountains	12	8	12
Tanque Verde Ridge	2	2	48
Tucson Mountains	2	1	50
Sabino Canyon	1	1	51
Patagonia Mountains	3	1	55
Santa Rita Mountains	2	1	59
Tortolita Mountains	1	1	119
East Tucson Riparian	0	0	128

Courtesy of The Arizona Nature Conservancy

The natural core areas in the Santa Cruz watershed have 15 endangered species, including five plants (Kearney's blue star, Nichol Turk's head cactus, Pima pineapple cactus, Huachuca water umbel, and Madrean ladies'-trusses), two fish (Gila topminnow and desert pupfish), two amphibians (Sonoran tiger salamander and Chiricahua leopard frog), four birds (southwestern willow flycatcher, masked bobwhite, cactus ferruginous pygmy-owl, and Mexican spotted owl), and two mammals (lesser long-nosed bat and jaguar). In Pima County, 9 mammals, 8 birds, 7 reptiles, 7 plants, 6 fish, 2 amphibians, and numerous invertebrates have been identified as being in need of protection.



Map showing natural core areas with high biological diversity within the proposed National Heritage Area.

Biological Corridors

Landscape features that connect large tracts of isolated habitat (natural core areas) across a fragmented terrain are present within the proposed National Heritage Area. Movement of wildlife through these linkages ensures that a species can persist in an isolated habitat patch and in the overall region. Wildlife activities within these corridors include foraging movements, seasonal migrations, and dispersal of juveniles. Additionally, the resultant connectivity between natural core areas fosters genetic exchange among wide-ranging plants and animals, helping to maintain viable populations, while maintaining migratory pathways in times of environmental change.

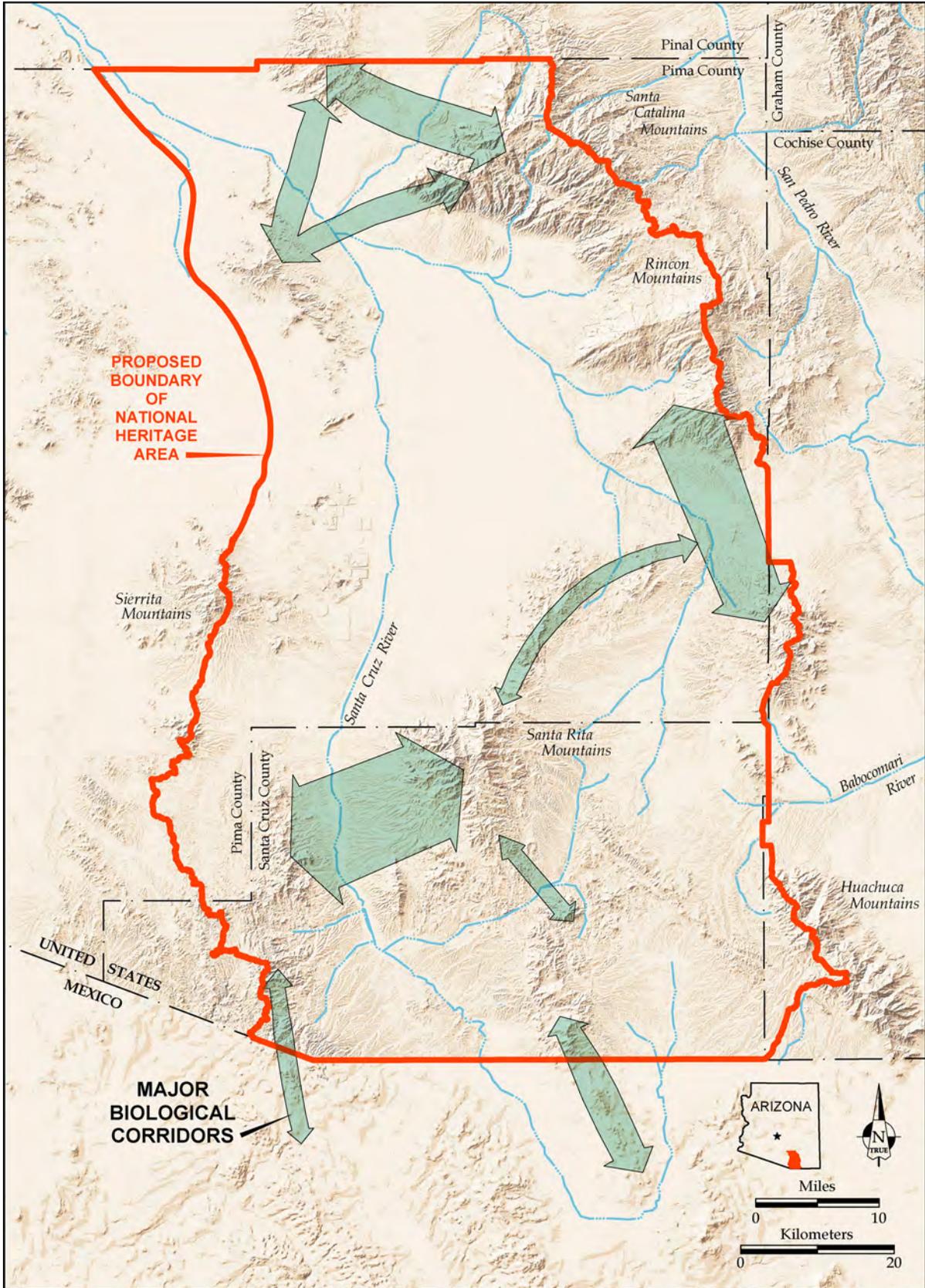
The Sky Island Alliance's Wildlife Monitoring Program has identified three critical wildlife corridors that fall within the proposed National Heritage Area: (1) the Tumacácori/Santa Rita Corridor links the Tumacácori/Atascosa mountain complex to the Santa Rita Mountains; (2) the Cienega Creek Corridor connects the Rincon Mountains east of Tucson to the Empire, Whetstone, and Santa Rita mountains to the south; and (3) the stretch of landscape south of the Santa Ritas, continuing to the connection to the Patagonia Mountains. Since 2001, the Sky Island Alliance's Wildlife Monitoring Program has mobilized volunteers to collect data on wildlife movement within the first two linkages.

In the spring of 2004, the Arizona's Missing Linkages Workshop, sponsored by the Arizona Game and Fish Department and the Arizona Department of Transportation, produced a statewide habitat linkage map identifying natural core areas and linkages. The Sky Island Regional Working Group listed 18 critical landscape linkages within southeastern Arizona, and placed both the Cienega Creek Linkage and the Tumacácori/Santa Rita Linkage at the top of the list with high biological value and facing high threat from urban development. These two critical linkages are also recognized as high priorities for protection in the Pima County Sonoran Desert Conservation Plan. There are several other linkages along spines of mountains that cross the border into Sonora, Mexico.

For many land animals, corridors that facilitate movement between Sky Islands are through riparian habitats. Eleven selected priority habitats and corridors were identified in the Sonoran Desert Conservation Plan for Pima County, and seven of these occur in the proposed National Heritage Area: Cienega Creek, Eastern Tucson Riparian Complex, Sabino Canyon, Santa Rita Mountains, Silverbell Mountains, Tortolita Mountains, and Tucson Mountains.

Scenic Landscapes

The proposed National Heritage Area includes some of the most breathtaking scenic landscapes in North America, highlighted by over 300 days of annual blue skies and majestic mountains. With numerous world-renowned observatories in the area (Mount Bigelow, Mount Hopkins, Kitt Peak, Mount Graham), the standards for outdoor lighting are more strict than in other parts of the nation, providing spectacular night skies for wonderment and stargazing. Daytime marvels include the saguaro-studded slopes of Saguaro National Park, the lush riparian forests along Sonoita Creek, and the splendor of the San Rafael Valley. Visitors during the rainy seasons will forever remember the seas of purple, orange, and red wildflowers. There are also mountain heights and the cool elevations of the Sky Islands. These can be reached by road (Mount Lemmon), hiking trails (Rincon Mountains), or a combination of the two (Santa Rita and Patagonia mountains).



Map showing critical landscape linkages in the proposed National Heritage Area.

Distinctiveness of Theme

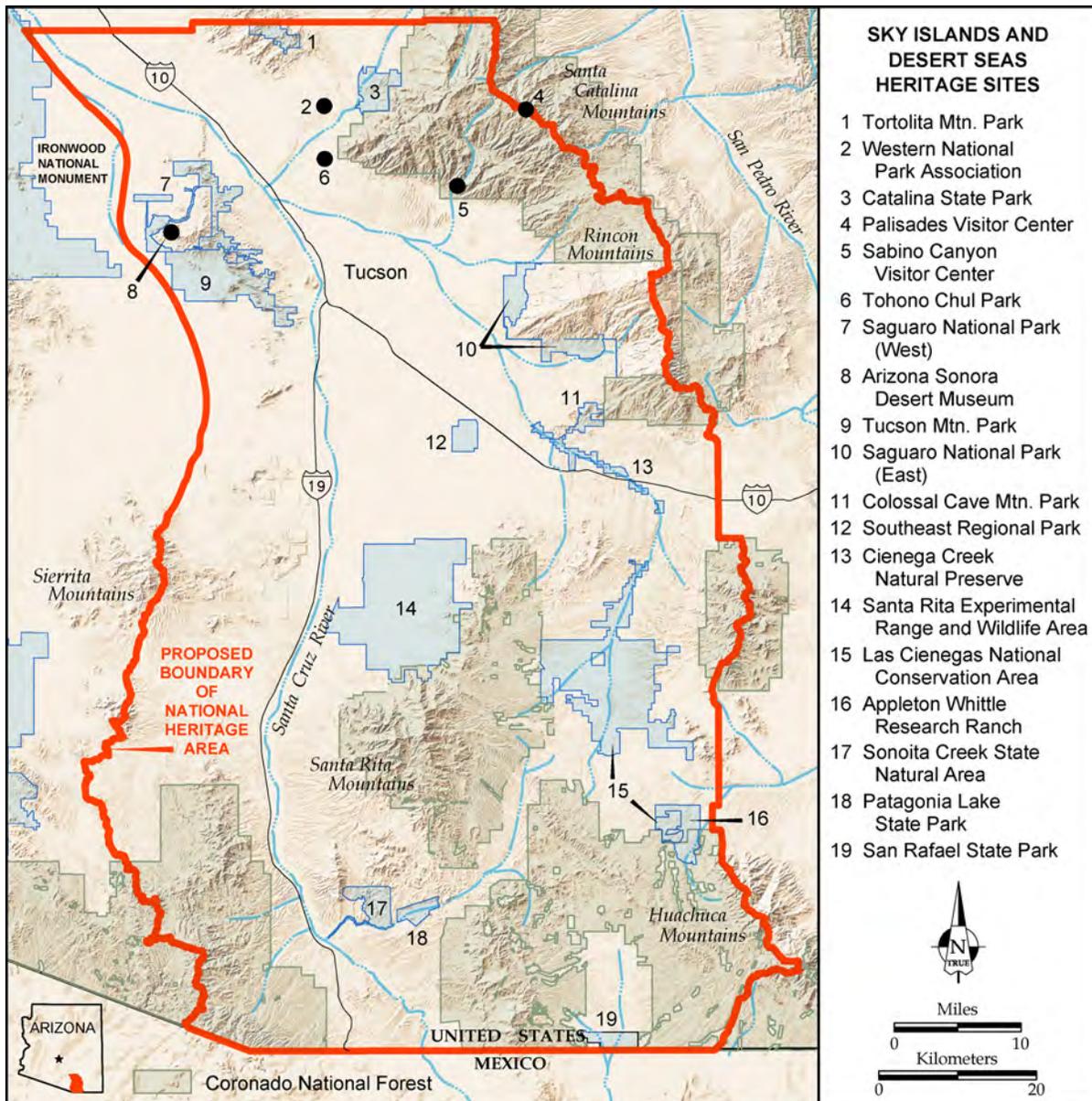
Sky Islands and Desert Seas is a distinctive theme among National Heritage Areas. The unique landscape of the proposed National Heritage Area is an environment that hosts the richest biological diversity in the State of Arizona and has supplied the natural resources that have enabled a diverse and rich cultural history. With about 1.5 million acres of public lands, parks, and preserves, the future conservation of this landscape and preservation of its rich cultural history is ensured. Further conservation and preservation efforts are primary goals of Pima County's Sonoran Desert Conservation Plan and Santa Cruz County's newly approved Comprehensive Plan.

Most urban and rural communities depend on nature and heritage tourism, and there is strong public awareness that if the natural and cultural resources are preserved, this will lead to increased tourism and economic development. Creation of a National Heritage Area will enhance the pride of people living in the area. To foster the understanding and knowledge of the area, place-based educational programs will be a primary objective in the mission of this proposed National Heritage Area. The unique qualities of the area are well known nationally, as reflected by the fact that this is a desirable place to live and one of the three most rapidly growing regions in the nation. With the establishment of a National Heritage Area, nature tourism can become a sustainable strategy of economic development that will balance promotion and preservation of the nature resources that make this region unique and that attract visitors from around the world.

The Sky Island region of southeastern Arizona, southwestern New Mexico, and northwestern Mexico is significant due to its rich diversity of species and habitats, and as the last North American stronghold for such magnificent predators as the Mexican gray wolf and jaguar. This is the only place in the United States where tourists can visit this Sky Island landscape and enjoy the exceptional scenic views and biological complexity in a designated National Heritage Area.

Astronomy Capital of the World

The numerous sky islands in the proposed National Heritage Area provide unparalleled opportunities for viewing and studying the night skies. Tucson is considered to be the astronomy capital of the world. Local ordinances require that streetlights and other outdoor lighting minimize light pollution, and there are more observatories and telescopes within a 50 mile radius of Tucson than anywhere else on our planet. Within the proposed Santa Cruz Valley National Heritage Area are the Smithsonian's Fred Lawrence Whittle Observatory (on Mount Hopkins), the University of Arizona's Steward Observatory (with facilities on Mount Lemmon, Mount Bigelow, and Tumamoc Hill) and Flandreau Observatory (with a 16-inch telescope for use by the public), and numerous private observatories. Local organizations include the Tucson Amateur Astronomy Association and the Southern Arizona Section of the International Dark Sky Association. Nearby is Mount Graham International Observatory and Kitt Peak National Observatory, the world's largest astronomical observatory and home of the world's largest solar telescope. These observatories include optical, radio and infra-red scopes. Kitt Peak and the Flandreau have educational programs for the public, and the Steward Observatory has been providing astronomy field camps on Mount Lemmon for the past 20 years.



Heritage sites located in the “Sky Islands and Desert Seas” of the proposed National Heritage Area.

Related Resources

Numerous places in the Santa Cruz Valley are available to the public, where they can experience and learn about Sky Islands and their surrounding deserts. Coronado National Forest includes all of the major mountain ranges, the Sky Island Scenic Byway (Mount Lemmon Highway), and the Madera Canyon and Sabino Canyon recreational areas. In the Santa Catalina Ranger District, the Palisades Visitor Center and Sabino Canyon Visitor Center have exhibits about Sky Island geology and natural history. Sky Island landscapes and wildlife can also be explored in Saguaro National Park (East and West Units), Catalina State Park, Colossal Cave Mountain Park, Tortolita Mountain Park, and Tucson Mountain Park. The natural histories and ecologies of Sky Islands and the Sonoran Desert are interpreted at Saguaro National Park, the Arizona-

Sonora Desert Museum, Tohono Chul Park, and the Tucson Botanical Garden. Relevant maps and publications can be found at the Western National Parks Association in Oro Valley, and at many local bookstores and businesses that sell outdoor gear. Each year, the Ironwood Festival is held at the Mason Audubon Center, and Tohono Chul Park hosts the Wildflower Festival.

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STREAMS IN THE DESERT

Summary of Theme

Some 90 miles of streams and rivers flow year-round in the Santa Cruz watershed. These support riparian habitats that are both beautiful and the keys to life in the desert. The word “riparian” describes the banks of streams and rivers, and the distinct plants and animals found there. At lower elevations, riparian habitats are dominated by big, billowing willow and cottonwood trees. At higher elevations, these are joined by hackberry, sycamore, ash, walnut, alder, and other trees. In dry regions such as southern Arizona, certain plants are found only in the moist conditions along streams and rivers. Some animals that roam mountains and deserts depend on visits to riparian areas, where they can rest, drink, and sometimes hunt. Other animals spend their entire lives in riparian areas and cannot survive without them. These include many fish, frogs, and bird species. Some 60-75 percent of all wildlife species in this region depend on riparian areas at some point in their lives, and 90 percent of all bird species are found in these desert oases. Riparian areas also function as movement or migration corridors for wildlife. North-south trending rivers such as the Santa Cruz are important migratory routes for birds.

Description of Theme

Riparian Areas

Riparian communities are those ribbons of life along banks of rivers, shoreline communities along slow or non-flowing waters such as marshes and lakes, and along the banks of dry washes in deserts. Riparian communities have three components: water availability, vegetation, and wildlife. These communities occupy less than 5 percent of the proposed National Heritage Area surface, but support 90 percent of its bird life. The majority of the 55 priority vulnerable species identified by the Sonoran Desert Conservation Plan in Pima County are associated with riparian-based ecosystems. Approximately 60-75 percent of all animal species in the area rely on riparian environments at some point during their lifecycle.

The Santa Cruz River provides a riparian corridor of a habitat similar to that in northern Mexico. Because the river has a north-south orientation, it is important as a flyway for migratory birds and bats. Its lush forests of cottonwood, willow, and velvet mesquite contrast with the adjacent dry desert and grassland. At higher elevations, riparian communities include hackberry, sycamore, ash, walnut, alder, and other trees. These riparian communities enable some subtropical species to extend their ranges north into Arizona; for some species, the watershed is the United States stronghold, or place where a species is most readily found. About 30 species of birds of subtropical origin have their northern limits within the region, and of the 36 species of raptors (birds of prey) that nest in Arizona, 31 do so in this watershed. The Santa Cruz watershed is also the northern most range of the jaguar, coatimundi, Mexican long-tongued bat, and banded rock rattlesnake.

For many organisms, the habitat structure of a forest or woodland is as important as the species of tree. This is true of the 4,500 acres of pecan groves (FICO Farms) south of Tucson.

This is an artificial riparian environment maintained for agriculture that provides many of the best ecological functions and values of the native riparian woodland. Many native riparian obligate bird species now live in or frequent this habitat, including the yellow-billed cuckoo, Swainson's hawk, and white-tailed kite, as do many amphibians, reptiles, and mammals.

Perennial Surface Water Flows

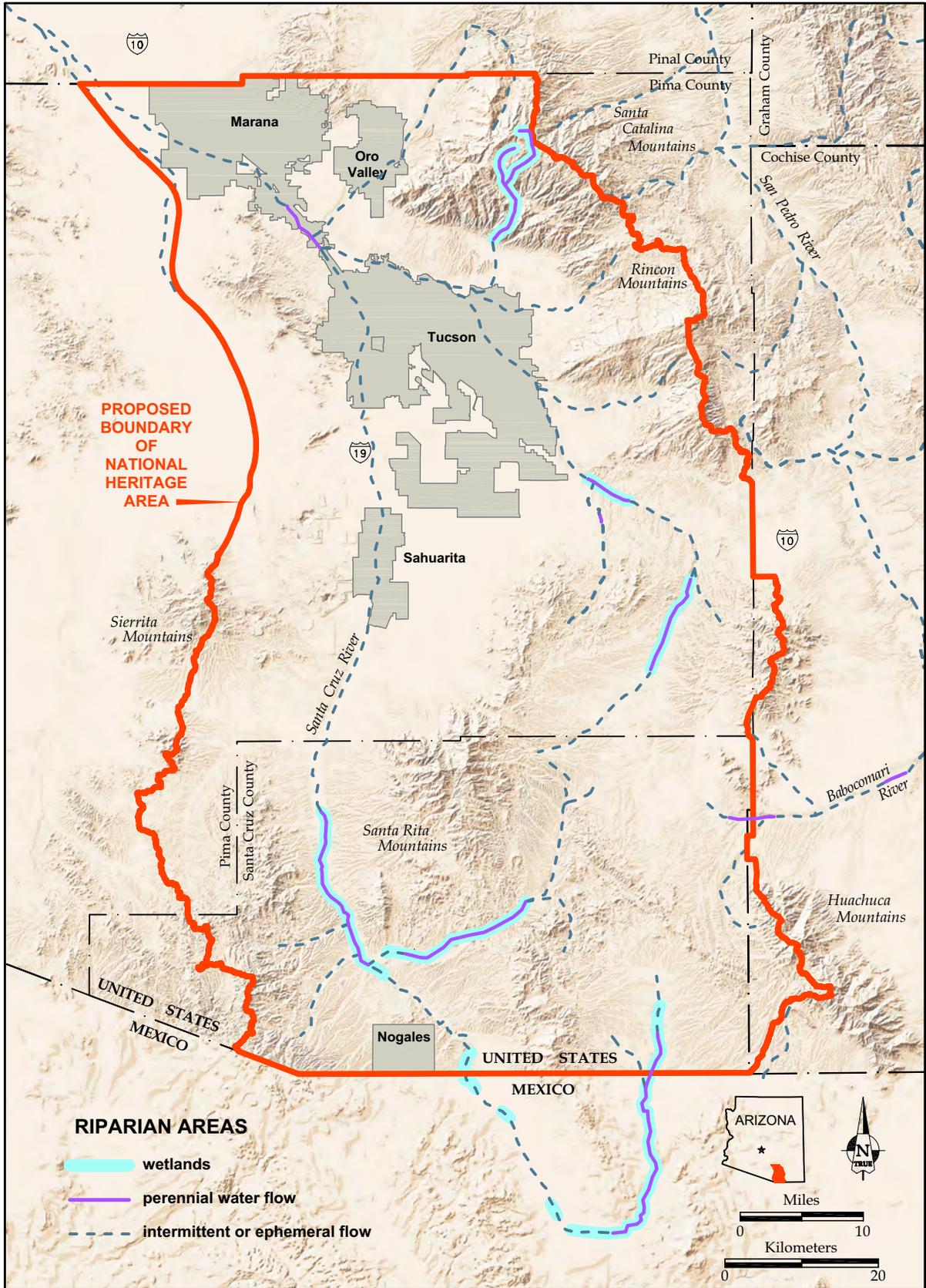
There are roughly 90 miles of year-round flowing water in the upper and middle watershed of the Santa Cruz River. Natural perennial surface flow of the river—varying with month, year, season, and rainfall—occurs only in the San Rafael Valley over a stretch of about 15 miles. Tributaries with year-round flow include Sonoita Creek (about 12 miles), Sabino Creek (about 10 miles), Cienega Creek (approximately 10 miles), and Davidson Canyon (roughly 6 miles). Peck Canyon, Potrero Wash, and Arivaca Creek each have a mile or less of intermittent surface flow, as well as numerous drainages and springs primarily in the surrounding mountains. Other parts of the proposed National Heritage Area have ephemeral (sporadic) surface flow only during heavy rains. Effluent (treated sewage) water maintains lush riparian vegetation and provides recharge for the aquifers along two stretches of the Santa Cruz River. One in Santa Cruz County begins at Calabazas and continues sometimes as far north as Canoa (25 miles). The other, in Pima County, begins at Roger Road and continues sometimes as far north as Red Rock (30 miles).

Cienegas (Wetlands)

Riparian marshes, called cienegas in Spanish, were once common along the Santa Cruz River and its tributaries. However, most dried up as the water table dropped from pumping, diverting flows, or draining to prevent malaria epidemics. The remaining cienegas are havens for vegetation and wildlife. The largest three are Potrero Wetlands (Las Lagunas or Meadow Hills) in the City of Nogales, Cienega Creek (Cienega Creek Natural Preserve, Las Cienegas National Conservation Area), and Sonoita Creek (Sonoita Creek State Natural Area, Patagonia-Sonoita Creek Preserve). Several small cienegas are located in the San Rafael Valley. A man-made cienega has been created at Sweetwater Wetlands in Tucson using effluent (sewer-treated) water.

Riparian Restoration and Rehabilitation

Riparian restoration is the effort to restore ecosystem structures and functions as they were at some point in the past. Riparian rehabilitation is when there is no attempt to create an ecosystem similar to what was present prior to the activities that degraded the resources. Riparian resources and aquatic systems are the most vulnerable and least protected habitats in the Santa Cruz watershed. Plans are in place to ensure that natural riparian systems be preserved, restored where possible, and managed to compensate for decades of largely unintentional destruction of these systems. Numerous projects are ongoing or planned that will increase riparian habitat in the proposed National Heritage Area. These restoration/rehabilitation projects include: (1) ongoing— one on the San Xavier District of the Tohono O'odham Nation, one south of the Town of Marana, and one in Santa Cruz County (Nogales); and (2) planned— more than 10 in Pima County which involve collaborative efforts of the county with the Town of Marana, City of Tucson, and the Army Corps of Engineers.



Map showing areas of perennial flow and wetlands in the proposed National Heritage Area (Nature Conservancy has map).

Riparian Restoration/Rehabilitation Projects in the Proposed National Heritage Area

Ongoing

- ◆ W:ak Hikdañ restoration site (San Xavier District of the Tohono O'odham Nation)
- ◆ Tucson Audubon's Santa Cruz River Habitat Project (south of the Town of Marana)
- ◆ North River Road (Santa Cruz County, City of Nogales)

Planned

- ◆ Town of Marana
- ◆ Tucson Origins Heritage Park (City of Tucson)
- ◆ Paseo de las Iglesias (City of Tucson, Pima County, and the Army Corps of Engineers)
- ◆ Christopher Columbus Park (City of Tucson and Pima County)
- ◆ Cortaro Mesquite Bosque (Pima County)
- ◆ Tres Ríos del Norte (Town of Marana, Pima County, and the City of Tucson)
- ◆ Río Antiquo (Pima County and the Army Corps of Engineers)
- ◆ Rillito Watershed Projects (various)
- ◆ Canoa Ranch (Pima County)

Distinctiveness of Theme

The Santa Cruz River is a natural treasure for three nations: United States, Tohono O'odham, and Mexico. The Santa Cruz River is nationally unique in that it originates in the United States, crosses into Mexico, and returns to the United States. Rising in the San Rafael Valley of southern Arizona, it crosses south into Sonora, Mexico, then turns north to reenter the United States east of Nogales. It continues north to cross a 10-mile stretch of the San Xavier District of the Tohono O'odham Nation, through Tucson, and then north-northwest to the Gila River west of Phoenix. Riparian areas along the banks of the Santa Cruz and its perennial tributaries are home to special plants and animals, and are corridors for wildlife movements and migrations. These oases are habitats and migration stopovers for many bird species. This theme is distinctive among existing National Heritage Areas.

Related Resources

Several stretches of the Santa Cruz River and its tributaries have year-round surface flows and are accessible to the public. The Santa Cruz River emerges in the San Rafael Valley, and flows with treated wastewater from Rio Rico to Tubac, and from Tucson to Marana. Two developed segments of the Juan Bautista de Anza National Historical Trail follow the riverbank between Rio Rico and Tubac. Portions of Cienega Creek are protected in Las Cienegas National Conservation Area and the Cienega Creek Natural Preserve. The Sabino Creek recreational area in Coronado National Forest has hiking trails, a paved road, and tram rides. The Patagonia-Sonoita Creek Preserve has trails and an interpretive center.

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BIRD HABITATS AND MIGRATION CORRIDORS

Southeastern Arizona, including the Santa Cruz Valley, is unsurpassed among North American birdwatching, or birding, regions. A major birding magazine rated it second among bird watching destinations in the United States. The diversity and rarity of bird species in southeastern Arizona owes to the available range of elevations and habitats. The affinities of the region to the Sierra Madre Occidental of Mexico make it the northern extent of several Mexican species. Riparian areas harbor nesting neotropical migrants such as common black-hawk, northern beardless-tyrannulet, and broad-billed hummingbird. Mid-elevation deserts and grasslands host birds such as varied bunting, Cassin's sparrow, and Montezuma quail. Sky Islands draw buff-breasted flycatchers, magnificent hummingbirds, and elegant trogons. Of the 36 species of raptors (birds of prey) that nest in Arizona, 31 do so in the Santa Cruz watershed. The north-south trending Santa Cruz Valley is also a major migratory corridor for species that winter in the tropics and nest north of the Mexican border. Over 400 bird species are found annually in the Santa Cruz Valley, and the region has 20 of the 50 stops on the Southeastern Arizona Birding Trail.

Description of Theme

Important Birding Sites and Habitats

The three leading national books on birdwatching sites in the United States include as among the most exciting destinations to birding in the United States: Las Cienegas National Conservation Area, Madera Canyon, Mount Lemmon, the Patagonia area along Sonoita Creek (including The Nature Conservancy's Patagonia-Sonoita Creek Preserve, Sonoita Creek State Natural Area, Patagonia Lake State Park, Patagonia Rest Stop, and Paton's Birder Haven), Sabino Canyon, Saguaro National Park (West), and Sycamore Canyon. Of the 50 recommended birding stops on the Southeastern Arizona Birding Trail, 20 are in the proposed National Heritage Area.

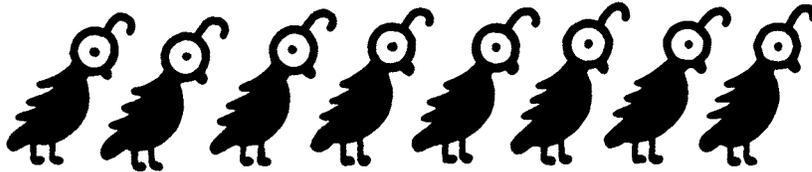
The Audubon Society, as the Partner Designate for Bird Life International, is working to identify a network of sites across the United States that provide critical habitat for birds. This effort, known as the Important Bird Areas Program, identifies those places that are critical to birds during some part of their life cycle (breeding, wintering, feeding, migrating). To date, nine sites have been identified in southeastern Arizona, and three of these are in the proposed National Heritage Area (Santa Rita Mountains, Sabino Canyon, and United States/Mexico borderlands of the upper Santa Cruz watershed). These are of national importance, because they include some of the most important bird habitats in the United States.

Southeastern Arizona provides birders with a list of specialty species that includes birds rarely or never found north of the Mexican border except in this region. The proposed National Heritage Area is a major destination for birders who want to include these on their life lists. Some of the most highly sought species on this list include the common black-hawk, gray hawk, Montezuma quail, whiskered screech-owl, cactus ferruginous pygmy-owl, buff-collared nightjar, violet-crowned hummingbird, broad-billed hummingbird, blue-throated hummingbird, magnificent hummingbird, elegant trogon, green kingfisher, gilded flicker, Arizona woodpecker, greater pewee, buff-breasted flycatcher, northern beardless-tyrannulet, dusky-capped flycatcher, tropical kingbird, thick-billed kingbird, sulphur-bellied flycatcher,

rose-throated becard, Mexican jay, bridled titmouse, painted redstart, red-faced warbler, rufous-winged sparrow, and yellow-eyed junco.

Migration Routes

The Santa Cruz Valley is a major north-south riparian flyway for birds and bats. Migrations occur in spring (late March-mid May) and fall (September-November). About 200 bird species migrate in the spring, including most of the hummingbirds (16 species), the largest number in the nation. Migration occurs over a broad front. Apart from the main flyway, which consists of large tracts of connected riparian habitat, there are oases that represent desirable but disjunct habitat. These include, among others, Harshaw Creek, Sabino Canyon, Sonoita Creek, Tanque Verde Creek, Agua Caliente Creek, Madera Canyon, Cañada del Oro Wash, Gardner Canyon, and Potrero Wetlands (Las Lagunas). With its rich riparian areas, unique desert habitats, diverse canyons, and extensive Sky Island landscapes, this area provides an important migratory corridor for millions of subtropical migrants and large numbers of wintering and migrating waterfowl.



Distinctiveness of Theme

No existing National Heritage Area has this as a theme. With over 300 days a year of sunny skies and mild winters, this is a birder's paradise. Over 400 bird species are found annually in the area, and some 30 of these can be seen here and virtually nowhere else in the nation. A recent study by the University of Arizona found that the top tourist attractions in the Tucson region are birdwatching and other nature-experience destinations, and a 2001 survey by the U.S. Fish and Wildlife Service concluded that, "bird watching is bigger than golf as a tourism and economic impact in Southern Arizona." As the top nature tourism activity in the nation, birding fuels the economic viability of related items and industries such as subscriptions to birding magazines, books on birding, binoculars, clothes, maps, nature-catering lodgings (which provide early breakfasts, sack lunches, advice on destinations, bird feeders), bird food and feeders, and other local enterprises. The presence of publicly accessible resources such as national, state, county, and city parks, preserves, public camp grounds, designated trails, scenic landscapes, riparian areas, water bodies, nature-based museums and gardens, annual events, and other businesses and organizations all add to the attraction of visiting a birding designation, as well as to the economic growth of the region.

Related Resources

The Tucson Audubon Society has identified 37 top birding spots in the valley that are open to the public (see Chapter 3). Birding tourism in this region is both domestic and international in origin, with visitors coming from every other state, and many parts of the world. Inns and

bed-and-breakfasts that cater specifically to birdwatchers dot the landscape. They often offer special resources such as bird feeders, advice on destinations, early breakfasts, and sack lunches. Annual birding events in the region include the Fiesta de los Aves and Annual Christmas Bird Count in Patagonia, the Festival of Hummingbirds and Great Backyard Bird Count in Tucson, and the Tucson Audubon Birdathon throughout southeastern Arizona.

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NATIVE AMERICAN LIFEWAYS (11,000 B.C. TO PRESENT)

Summary of Theme

The Santa Cruz Valley is one of the longest inhabited places in North America and the homeland of two Native American tribes. Archaeological traces indicate a series of prehistoric cultures flourished in this region between the end of the last Ice Age and the beginning of Spanish colonial activities in the late seventeenth century. The cultural achievements of these prehistoric cultures include the first agriculture, canals, pottery, and villages in the Southwest. This valley has been part of the territory of the Tohono O'odham (People of the Desert) since prehistoric times, and groups of the Yoeme (Yaqui) tribe of western Mexico arrived here in several waves beginning in the early nineteenth century. Today, the cultural traditions of the Tohono O'odham and the Yoemem are celebrated at several annual festivals and craft fairs, and the artifacts of their predecessors are displayed and interpreted in numerous museums and archaeological parks.

Description of Theme

Prehistoric Cultures

Near the end of the Ice Age, about 11,000 B.C., Paleoindian hunters of the Clovis culture traveled the Santa Cruz Valley in search of mammoths and other now-extinct large mammals. Their spear points are currently the oldest evidence of human presence in the region, and they mark the beginning of the long and rich human history of the valley. Traces of a series of prehistoric cultures that flourished during various timespans between about 11,000 B.C. and the late seventeenth century A.D are preserved on and beneath the surface. These cultures included groups of the earliest people on the continent, the first farmers and villagers in the Southwest, unique variants and blends of the Hohokam and Trincheras cultures of the Sonoran Desert, and the first southern Arizona tribe to come in permanent contact with Europeans. All of these prehistoric cultures were centered on the linear oasis created by the river—the common thread through their histories.

Two periods of continent-wide drought occurred during the Clovis time (about 11,500-10,900 B.C.), and a combination of drought and overhunting may explain the extinctions of mammoths, horses, camels, ground sloths, and other large Ice Age animals which correlate with the end of the Clovis culture. Geological and biological evidence indicate water tables rose in southern Arizona during a global period of colder conditions between about 11,000 and 9500 B.C. After this reversion to nearly Ice Age conditions, the climate began to warm rapidly at the beginning of a new global climatic era, the Holocene. A now-extinct form of bison continued to be hunted by late Paleoindian groups in southeastern Arizona and in some other regions in the West.

Scientists debate whether the period of hotter climate between approximately 6500 B.C. and 3500 B.C. was also drier, but the lack of any archaeological sites that can be confidently dated to this interval suggest the Santa Cruz Valley and the rest of the desert lowlands of the Southwest were largely abandoned by people. In southern Arizona, there are also signs that rivers, streams, springs, and lakes dried up, and sand dunes formed and moved with the

wind. Sediment layers show that the downcutting channel of the Santa Cruz River incised the floodplain, while sediments eroded from the surrounding landscape accumulated at the channel margins. Bison, elk, mountain sheep, and pronghorn—the last remnants of the Ice Age fauna—appear to have shifted their ranges to higher elevations or to other regions.

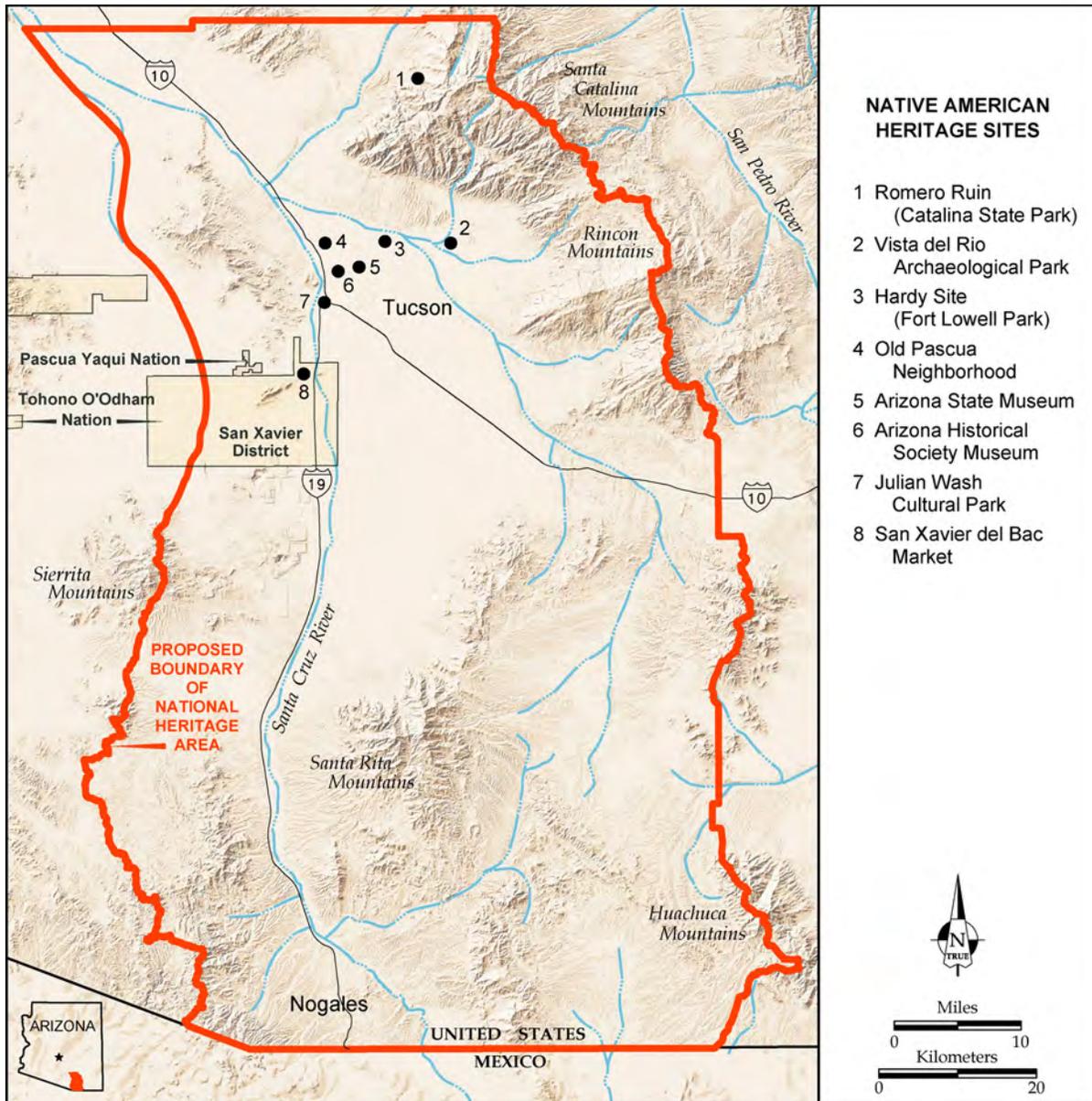
The climate of the Southwest became cooler and wetter about 3000 B.C., the beginning of the late Holocene. Lakes refilled, rivers and springs flowed again, and floodplains began to build up anew. The deep, wide channel of the Santa Cruz River began to fill with fine sediments. Hunter-gatherers returned to the low deserts, and the old way of life was revived, but with increasing reuse of the same locations. Groups repeatedly camped on the banks of the Santa Cruz River during seasonal movements between the uplands and lowlands. Butchered bones found at campsites in the lower and middle Santa Cruz Valley indicate the return of bison to the area (the smaller form living today) and their importance to the hunting and gathering bands of that time.

Direct radiocarbon dates on archaeological maize (corn) remains indicate agriculture arrived in southern Arizona from Mexico by 2000 B.C. To supplement wild resources, hunter-gatherers in the region planted maize and grew some of their food for the first time. These part-time farmers built pithouses and storage pits in summer camps near their fields along the Santa Cruz River and made the first ceramic figurines and pottery in the Southwest. This modest start began 2,000 years of increasing dependence on agriculture and sedentism, a period during which this region was perhaps the foremost center of population and cultural development in the Southwest.

By 1200 B.C., farmers living in early villages along the Santa Cruz River in the western Tucson Basin constructed the earliest known irrigation canals in North America. In addition to maize, they cultivated squash, tobacco, and possibly beans and cotton. Objects resembling spindle whorls for spinning yarn may be evidence that they were also the first cotton weavers in the Southwest. A string of culturally related farming communities along the river maintained close social connections with each other and developed trade connections with distant parts of the Southwest, California, and northern Mexico to acquire volcanic glass for making dart points and seashells for making jewelry. House groups and large, special buildings that appeared in villages along the Santa Cruz River after 800 B.C. are indications that communities were composed of multiple households that were integrated by public meetings and ceremonies. Small stone projectile points suggest the bow-and-arrow began to be used in southern Arizona about this time—earlier than in other regions of the Southwest.

Following a decline in the water table and a cycle of channel downcutting near A.D. 100, new types of architecture, pottery, stone tools, and burial types appeared in the Tucson Basin, perhaps indicating the arrival of a new cultural group from the uplands of the Southwest. If so, overlapping radiocarbon dates mean this new group coexisted for about 100 years with the older farming culture in the valley. Pithouses shifted from round to rectangular about A.D. 400; large villages developed along the Santa Cruz River, with village locations moving to terraces above the floodplain. There, communities grew and developed—some in the same locations for a millennium—as the river flow and floodplain remained stable.

Between roughly A.D. 550 and 750, styles of architecture, artifacts, graphic symbols, and burial practices of the Hohokam culture spread from the Phoenix Basin into the middle Santa Cruz



Native American heritage sites in the proposed National Heritage Area.

Valley and the rest of the Tucson Basin. Plazas became the central features of villages, the largest of which also had Mesoamerican-style ballcourts by about A.D. 800. By A.D. 1000, villages were spread out along expanded canal systems. Ballcourts were no longer built in the Tucson Basin and most other Hohokam areas after about A.D. 1050.

Beginning approximately A.D. 750, villages in the upper Santa Cruz Valley were also influenced by the Trincheras culture centered in Sonora. For the next several hundred years, the valley was a borderland between these two Sonoran Desert cultures, which were blended in local communities. The valley was also a corridor of trade in locally made seashell jewelry, pottery, and probably cotton textiles, as well as macaws and copper items from Mesoamerica.

Near A.D. 1150, many Hohokam villages in the middle Santa Cruz Valley were abandoned and new villages were established, possibly in response to a major cycle of channel downcutting that forced the abandonment of canal systems in the floodplain. After this, new types of runoff farming were developed on the bajadas above the floodplain. Walled compounds and aboveground adobe architecture appeared in the new villages, and platform mounds were built as public ceremonial structures. The population of the region became concentrated in a few large villages by A.D. 1275, perhaps in response to increasing warfare.

Between about A.D. 1400 and 1450, the Hohokam culture of southern Arizona collapsed after a population decline. In the Phoenix Basin, this decline was marked by malnutrition and high mortality rates, perhaps due to overpopulation and a series of droughts punctuated by large floods that destroyed most canal systems. What happened to the Hohokam villages in the middle Santa Cruz Valley is less well understood. To the south, the numbers and sizes of Trincheras villages also began to decline during this period for unknown reasons.

During the period between approximately A.D. 1450 and the 1690s, several related Piman tribes lived in villages in the Santa Cruz Valley. They farmed the floodplain with floodwaters and canals, but also continued to hunt and gather wild plant foods. Their material culture resembled those of other Piman peoples in southern Arizona and northern Sonora. Archaeologists do not currently know much about the people living in southern Arizona during this period, because very few sites have been identified or investigated. However, gaps in the Santa Cruz Valley archaeological record may reflect intervals of abandonment, as appear to have happened in the neighboring San Pedro Valley.

The available archaeological and documentary evidence suggests that, at about the same time in the late seventeenth century, Apaches arrived from the north and began to raid native Piman villages, while Europeans entered the valley from the south. Spanish colonists founded cattle ranches in the upper Santa Cruz Valley in the 1680s, and in the 1690s, Jesuit missionaries started a chain of missions in native villages in the upper and middle valley. With the establishment of these permanent contacts with Europeans who made maps and kept written records, the human story of the Santa Cruz River Valley entered into historical time.

Timeline of Santa Cruz Valley Prehistory

- 11,000 B.C. Paleoindian hunters cross the Tucson Basin in search of mammoths and other now-extinct large mammals at the end of the Ice Age (the Pleistocene). All of the large Ice Age mammals except bison soon disappear in the Southwest, possibly due to a combination of drought and overhunting.

- 9000 B.C. The climate warms at the beginning of a new global climatic era, the Holocene. In southern Arizona, bison continue to be hunted by Paleoindians, while a hunting and gathering (Archaic) adaptation develops. This new lifeway is based on seasonal mobility and foraging for smaller animals, seeds, nuts, and fruits of wild plants, and the use of seed grinding tools.

- 6500 B.C. A long period of hotter, drier climate during the middle Holocene begins; population declines in the lowlands of the Southwest.

- 3000 B.C. The climate of the Southwest becomes cooler and wetter at the beginning of the late Holocene. Hunter-gatherers spread back into the lowlands; foragers camp on the banks of the Santa Cruz River during their seasonal rounds.
- 2000 B.C. Maize (corn) arrives in southern Arizona from Mexico. To supplement wild foods, foragers in the region plant maize to grow some of their food for the first time. They build pithouses and storage pits in summer camps near their fields along the Santa Cruz River and make the first ceramic figurines and pottery in the Southwest.
- 1200 B.C. Farmers in early villages along the Santa Cruz River build the first canals in North America. They grow maize, squash, and possibly beans and cotton, and develop trade with distant parts of the Southwest, California, and northern Mexico to acquire volcanic glass for making dart points and seashells for making jewelry.
- 800 B.C. The first ceremonial buildings in the Southwest are constructed in villages along the Santa Cruz River. Earlier than in other areas of the Southwest, the bow-and-arrow begins to be used in southern Arizona alongside the older spearthrower-and-dart.
- A.D. 100 New types of architecture, pottery, and burial practices suddenly appear in the valley, perhaps representing the arrival of a new cultural group from the uplands of the Southwest.
- A.D. 400 Pithouses shift from round to rectangular, and large villages develop along the Santa Cruz River; village locations move to terraces above the floodplain.
- A.D. 550 Styles of architecture, artifacts, and burial practices of the Hohokam culture, centered in the Phoenix Basin, begin to appear in the Santa Cruz Valley; plazas become central features of villages.
- A.D. 800 The first Mesoamerican-style ballcourts are built in the southern Southwest. Villages with central plazas grow in population in the Santa Cruz Valley. Hohokam styles and iconography from the middle Gila Valley are adopted, and the Trincheras culture in Sonora begins to influence villages in the upper Santa Cruz Valley.
- A.D. 1000 Villages in the valley spread out along expanded canal systems.
- A.D. 1050 Ballcourts are no longer built in Hohokam-influenced areas.
- A.D. 1150 In the middle Santa Cruz Valley, many Hohokam villages are abandoned and new villages are established. Compounds and rectangular, aboveground architecture appear.
- A.D. 1275 Population in the valley concentrates – possibly in response to warfare – into a few large villages. Platform mounds are built as public ceremonial structures within large walled compounds.

- A.D. 1450 The Hohokam culture collapses after a period of population decline due to malnutrition, droughts, and disastrous floods in the Phoenix Basin that destroy major canal systems. The Trincheras culture also begins to fade.
- A.D. 1680 Spaniards arrive from the south and establish cattle ranches in the upper Santa Cruz Valley, and Apaches arrive from the north and begin raiding ranches and native Piman villages along the river.
- A.D. 1691 Father Kino, the first European to visit the middle Santa Cruz Valley, finds villages of Piman-speakers at Guébavi and Tumacácori. The next year, he travels farther north and finds Bac and Chuk-shon.

The Tohono O'odham (People of the Desert)

During the late 1600s, the Jesuit missionary Eusebio Francisco Kino explored the borderland region that now includes northern Sonora and southern Arizona. He and other early Spanish missionaries, explorers, soldiers, and colonists found the region inhabited by the O'odham people, who they called the Pima Altas (Upper Pimas) to distinguish them from the Pima Bajos (Lower Pimas) living in southern Sonora. Among the O'odham, they distinguished several subgroups, including the Sobaipuri of the Santa Cruz and San Pedro river valleys, the Papago of the desert region between the Santa Cruz and Colorado rivers, and the Gileños living along the Gila River to the north. Over the next 300 years, several O'odham groups disappeared as a result of diseases introduced by the Spanish and displacements by colonizing Spanish and raiding Apaches. The Sobaipuri of the San Pedro Valley fled from the Apaches and resettled in the Santa Cruz Valley, where they became integrated with the Papagos, now known as the Tohono O'odham (People of the Desert).

Some modern scholars think the Tohono O'odham are one of the most ancient peoples of southwestern North America, occupying this region for many thousands of years. The Tohono O'odham themselves, and some scholars, trace their origins to the Hohokam culture that flourished in this region between about A.D. 450 and 1450. Another view supported by a few scholars, and also by an oral history version of the origin of the Gila River Pimas recorded in the early 1900s, is that the O'odham migrated from southern Sonora to this region in the 1400s, and then warred with the Hohokam culture, contributing to its collapse. Regardless of which version is accepted, the Tohono O'odham are clearly a very ancient culture of the Sonoran Desert and are part of a chain of related, Piman-speaking cultures that extends from Jalisco in western Mexico to Phoenix, Arizona. Some scholars argue that the Hohokam culture developed as a result of Mesoamerican influences that spread along this corridor of related cultures speaking Piman languages.

From ancient times until the late nineteenth century, the Tohono O'odham lived in dispersed villages (*rancherías*) along low-elevation drainages during the summer to grow crops of corn, squashes, melons, and beans in areas flooded by summer rains. They then moved to villages at higher elevations during the winter to use springs and wells that have water year-round. The saguaro wine festival marks the beginning of the Tohono O'odham year, and it is an

important part of the agricultural cycle. The native Devil's claw plant is cultivated to provide a source of fiber for weaving distinctive coiled baskets.

Today, some 18,000 members of the Tohono O'dham Nation live in three reservations in southern Arizona, including the San Xavier District in the Santa Cruz Valley, established in 1874. Located on the San Xavier District is a Spanish Colonial church completed in 1797, and representing a mixture of baroque and native styles. This church still serves the residents of the district, and the adjacent plaza is used for powwows and craft fairs. Traditional coiled baskets are made by elders, as well as by young people learning the craft. A farmers' cooperative produces and sells native crops near the church. A casino is an important employer and a source of funding for housing, education, and other services.

The Yoemem (Yaquis)

The Yaqui Valley in southern Sonora, Mexico, is the sacred homeland (the *Hiakim*) of the Yoemem people, a native Indian group of northwestern Mexico. Since ancient times, they have planted corn, beans, and other crops in the rich floodplain of the Yaqui River after the annual flood recedes. After Jesuit missionaries converted the Yoemem to Catholicism during the 1600s and 1700s, they also raised livestock introduced by the missionaries. In 1814, Yoemem Indians were brought north to work gold mines near the Guevavi Mission in the Santa Cruz Valley.

The Yoemem homeland was never conquered by the Spanish or Mexican governments. The natives of this region rose up in revolts in 1740, and again when Mexico gained independence from Spain in 1821. Warfare lasted throughout the nineteenth century as the Yoemem resisted intrusions by non-Indian settlers supported by the Mexican army. Massive deportations by the Mexican government during the early 1900s led many Yoemem to flee, and they dispersed throughout northwestern Mexico to work in mines and on haciendas, changing their names to hide their identities and abandoning their public religious ceremonies. Many crossed the border into Arizona by following the railroad tracks and working as laborers on the railroad and in cotton fields around Tucson, Phoenix, and Yuma. Anthropologist Edward Spicer noted that by 1910, the Yaquis "had become the most widely scattered native people in North America." The deportation program ended with the Mexican Revolution in 1910, in which the Yoemem fought against the old government.

In southern Arizona and their homeland, the Yoemem gradually resumed their public religious ceremonies, including the Lent and Holy Week ceremonies, which blend indigenous beliefs with Christian symbols. Another important public ritual is the killing-the-deer ceremony (*maso me'ewa*), which takes place on the first anniversary of the death of a relative. Yaqui public rituals are important expressions of ethnic identity, yet they are universal in that they are open to outsiders and seek blessings for all men and women.

Today, the Yoemem have lands in both Mexico and the United States that are formally recognized by the governments. In Mexico, a 1937 decree by the Mexican president created the Yaqui Indigenous Zone along the Rio Yaqui. In the United States, the Pascua Yaqui Association received 200 acres of land southwest of Tucson in 1964. A grant from the Office of Economic Opportunity in 1966 allowed the association to begin building New Pascua Pueblo,

and in 1978, New Pascua gained official recognition as a United States Indian tribe. However, the older Yoemem communities of Pascua and Barrio Libre in Tucson, Yoem Pueblo in Marana, and Guadalupe on the outskirts of Tempe are not recognized by the U.S. Bureau of Indian Affairs. These communities receive help from the tribal government of New Pascua, which earns its own revenues from gaming and hosting events in a new outdoor arena. The Yoemem culture continues to flourish in southern Arizona.

Distinctiveness of Theme

None of the 24 existing National Heritage Areas have a theme related to Native American history and cultural traditions. Such a theme, as outlined here, is central to the long history of the region, and will be unique among National Heritage Areas. Like many regions of the western United States, the Santa Cruz Valley has vibrant Native American communities with deep roots in the region. Celebration of the cultural contributions of Native Americans to the story of this nation is very appropriate and overdue, and the proposed Santa Cruz Valley National Heritage Area provides an opportunity for this expression.

Related Resources

The Native American history and cultural traditions of this region are interpreted and celebrated at a number of places and events open to the public. In and near Tucson, artifacts and exhibits about prehistoric cultures of the Santa Cruz Valley can be found at the Arizona State Museum and the Arizona Historical Society Museum. Archaeological sites with interpretive trails and outdoor exhibits include the Hardy site at Fort Lowell Park and Romero Ruin at Catalina State Park, and more are being developed at the Julian Wash Cultural Park, Vista del Rio Archaeology Park, and Tucson Origins Heritage Park. Lectures and other local events related to the ancient cultures of this region are held during Arizona Archaeology Month. Tohono O'odham baskets and other crafts can be purchased at the San Xavier del Bac Market and the annual Southwest Indian Art Fair at the Arizona State Museum. Corn, pearly beans, squashes, and other traditional native crops can be purchased at the San Xavier District Farming Co-op. Native American dancing, drumming, and singing are showcased at the American Indian Heritage Powwow and Craft Fair, the Indian America New Years Competition Powwow, the Native American Heritage Month Powwow, and the Wa:k Powwow. The Yaqui Easter Ceremonies in the Old Pascua neighborhood in Tucson features a week of public ceremonies that includes traditional dancing, music, and masks.

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SPANISH AND MEXICAN FRONTIER (1680 - 1854)

Summary of Theme

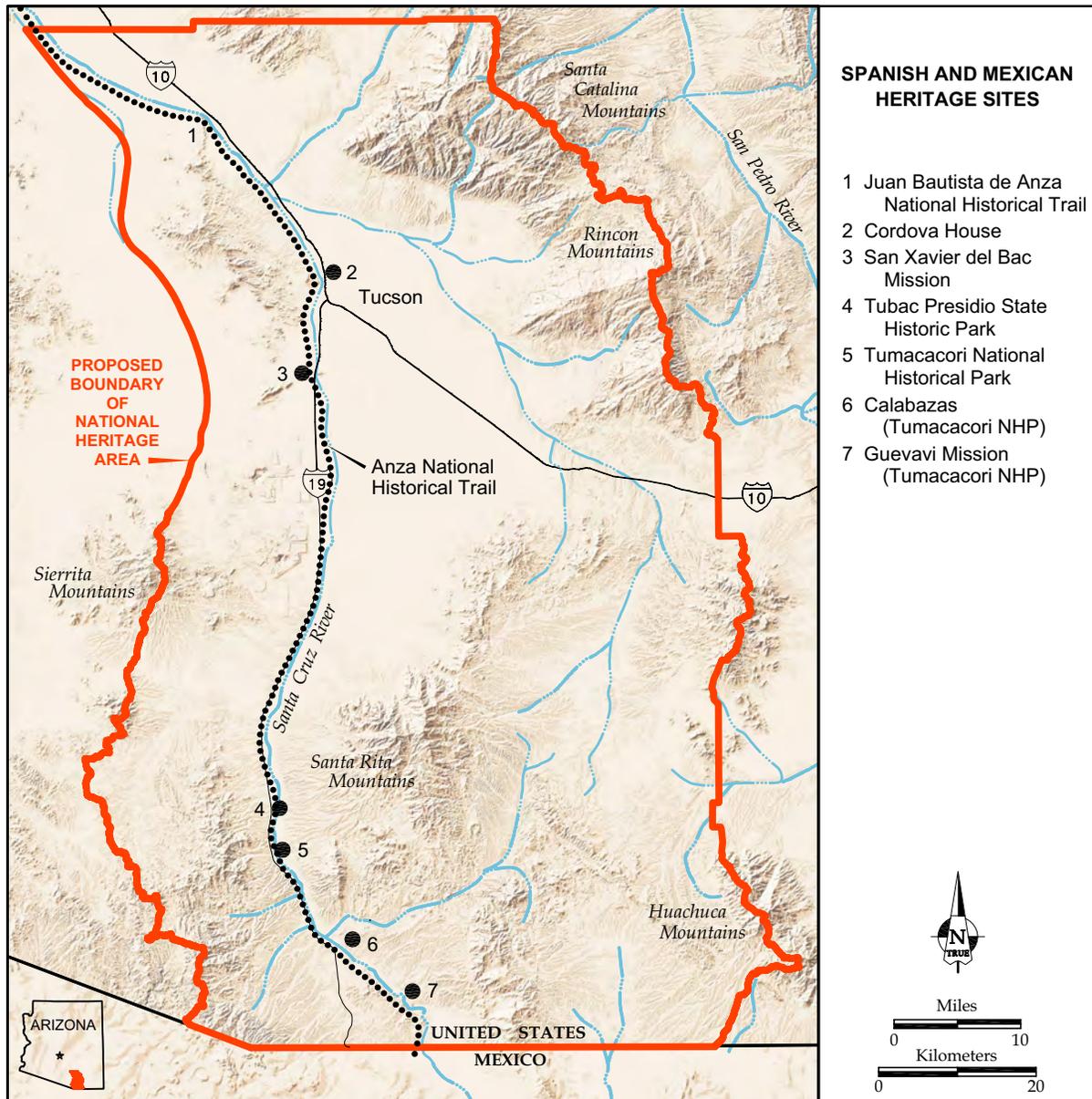
The proposed Santa Cruz Valley National Heritage Area will be the first National Heritage Area on the border with Mexico. The Santa Cruz Valley was once the northern frontier of New Spain – an isolated and often inhospitable region where Spanish colonists, soldiers, and missionaries interacted with local Native American populations beginning in the 1680s. The region became part of Mexico when Mexico won independence from Spain in 1821, and then became part of the United States when the Gadsden Purchase was signed in 1854. Despite the changing political jurisdictions, many of the early Spanish and Mexican settlers have living descendants in the area today. A number of the presidio fortresses, missions, and ranches occupied between the 1680s and 1854 are still preserved in the Santa Cruz Valley, and many are open to visits by the public. Most of these heritage sites from the Spanish and Mexican periods are under the management of various governments; however, there is currently no interpretive link between them. Designation of a Santa Cruz Valley National Heritage Area will increase awareness of the rich and unique Spanish and Mexican heritage of the region, allowing local residents and tourists the opportunity to visit and learn about the deep history that connects this region with Mexico.

Description of Theme

The arrival of Christopher Columbus' fleet in the New World in 1492 led to the conquering of modern-day Mexico and the gradual expansion of Spanish authority northward into what is today the United States. Beginning in the 1530s, Spanish missionaries and military personnel in search of souls and resources traveled through what are now the states of New Mexico, Arizona, and California.

In Arizona, the efforts of Europeans were focused on the Hopi and Zuni pueblos in the north, and along the Colorado, San Pedro, and Santa Cruz rivers in the south. The Spanish and subsequent Mexican northern frontier extended from the Colorado River on the west, to the Rio Grande on the east. Between them, the Santa Cruz River and its valley was the focus of the heaviest occupation. The ready availability of water, fodder for grazing animals, irrigable fields, mineral resources, and relatively friendly Native American populations made the Santa Cruz Valley the hotspot of activity along the northern frontier of the Pimería Alta (Land of the Upper Piman Indians) from about 1680 onward. Native American uprisings and attacks increased through time, and eventually only the Santa Cruz Valley settlements remained. Small, isolated communities endured, with the residents watching warily as the area became part of the United States in the 1850s.

The interplay between local Native Americans, Spaniards, and Mexicans created a distinctive community along the border. The relative isolation of the area, quite distant from large commercial and manufacturing areas, fostered greater self-sufficiency and a reliance on cooperation and interaction among these groups. The result was the development of distinctive cultural traditions, architecture, and foodways in this border region. Many of these traditions, including the Sonoran rowhouse architecture and the use of Sonoran Desert plants as food resources, have continued into the modern period. Other traditions, such as the Día de San Juan festival, have been revived in recent times and are becoming increasingly important to



Spanish and Mexican heritage sites in the proposed National Heritage Area..

both local residents and visitors from across the nation and the world. The Spanish and Mexican heritage of the region is one of the reasons that have compelled an increasing number of tourists to explore the Santa Cruz Valley.

The Native Americans who lived along the course of the Santa Cruz River – the Pimans and Papagos (today known as the Tohono O’odham, or People of the Desert) – had probably heard stories of the newcomers heading north before these strangers actually traveled through the region. The 1530s and 1540s saw a handful of Spanish expeditions journey through the southeastern part of what is today Arizona. The first permanent Spanish presence in the Santa Cruz Valley was the cattle ranch established by Jose Romo de Vivar in 1680, at San Lázaro on the upper reach of the river, in what is now Sonora. However, more significant interactions

did not develop until Father Eusebio Francisco Kino was dispatched to New Spain's northern frontier in the 1690s.

Father Kino was a man of many talents. A Jesuit priest born in Italy in 1645, he was sent to the Pimería Alta to serve as a missionary to the Native Americans of the region. He traveled out to small communities, learning the Piman language so he could preach to them about his Catholic beliefs. Kino was an inquisitive man interested in understanding the history and geography of the area. He was shown blue seashells by some of his Native American friends, and afterwards, attempted to find an overland route to California, where he knew the shells originated from.

Kino and accompanying priests and soldiers were the first Europeans to travel north along the Santa Cruz River into what is now Arizona. Their journeys during the 1690s and early 1700s brought local Native Americans into contact with new ideas, technologies, and sources of food. Kino introduced cattle, sheep, horses, wheat, peaches, lentils, figs, onions, and other crops to communities along the river.

Unfortunately, the newcomers also brought diseases that local inhabitants were not immune from. Many people died from epidemics of measles, smallpox, and other contagions. The Spaniards had difficulties in understanding the time-honored yearly rounds of the Native Americans, who lived at their farming villages for part of the year and traveled out to gather wild resources for months at a time. The Spaniards preferred complete sedentism, so they could preach Christianity to the Indians and ensure that they were following European moral codes. Further, year-round occupation at villages allowed for a steady labor source. The introduction of European crops made this more possible, but attempts to change Native American lifestyles proved difficult.

Jesuit missions, where Native Americans could receive religious instruction and would supply labor, were established at Guevavi in 1691 and San Xavier del Bac in 1700. Visiting missions, known as *visitas*, were established at Tumacácori in 1691, San Agustín in 1700, and Calabazas in the 1750s. Priests initially traveled to these places several times a year. It was not until the 1730s that a permanent European presence was established.

Local Native Americans soon began to chafe under Spanish authority. By November 1751, interactions between the two groups soured as Native Americans grew tired of their land being taken, and angered at punishments and insults meted out by some of the missionaries. The Pimans revolted, forcing Spanish priests and settlers to flee south into Sonora. The following year, the Spaniards returned and constructed a presidio fortress, at Tubac, which was a small Piman rancheria 4 miles north of the mission at Tumacácori. A garrison of about 50 soldiers was stationed at the presidio, ensuring peace among the local Pimans and protecting the area from Apaches, who had begun to conduct raids into the area from the north, attacking settlements and capturing livestock.

Other Spaniards trickled into the area, operating ranches and prospecting for mines. Raids by the Apaches against both Spanish and local Native Americans grew. In the 1760s, the Sobaipuri Pimans, who lived along the San Pedro River to the east, moved to Tucson to live at the Mission of San Agustín. In 1775, Juan Bautista de Anza led two expeditions from the Tubac Presidio to establish a colony at San Francisco, California.

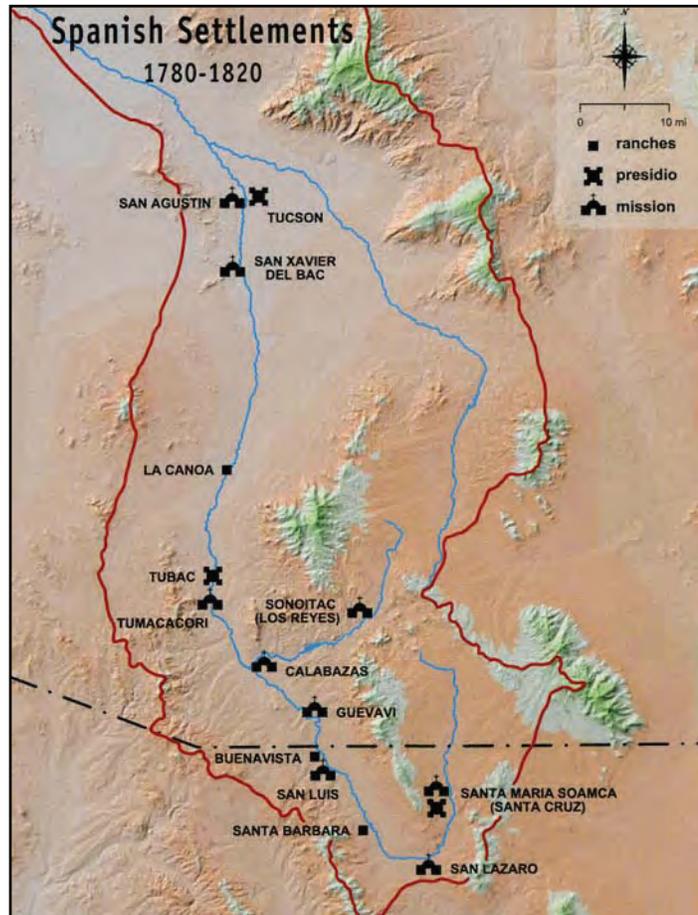
Concerns about the overall security of the northern frontier led the Spanish military to have Irishman Hugo O'Connor make an inspection tour in 1775. He decided a new presidio was needed along the San Pedro River, and the Terrenate Presidio was constructed in 1776. That same year, he ordered the garrison at Tubac be moved north to Tucson. This was accomplished the following year, although the soldiers failed to construct the new fortress according to new regulations.

Meanwhile, the Terrenate Presidio proved to be a failure, with constant attacks killing 80 soldiers, including two of the fort's commanders, over a four-year period. It was abandoned in 1780. The soldiers at Tucson failed to heed this warning, and in May 1782, a group of about 500 Apache warriors attacked the presidio and mission. A desperate battle ensued, but the small garrison of Spanish soldiers was

able to repulse the Apaches through the providential firing of a brass cannon. The Apaches had never heard such a loud sound, and fled the area. The soldiers spent the next year hurriedly enclosing their fortress within a tall adobe enclosure, about 670 ft to a side, guarded by 20-ft-tall towers on opposite corners.

The priests at San Xavier began construction of a new, grand church in 1783. Architects and artisans from Mexico and local Papagos fired adobe bricks and spent the next 14 years raising a dramatic cross-shaped chapel, its interior decorated with religious statues and paintings. The old church from the 1750s was dismantled and the materials converted into a convento, where resident priests lived. Afterwards, the trained workers probably moved to the Mission of San Agustín in Tucson, where they constructed a two-story convento, a chapel, a granary, and enclosing walls for the mission and nearby gardens. In 1800, work began on a new church at Tumacácori, a structure that would not be completed until the 1820s.

Political turmoil was developing in Mexico, as many people sought independence from Spain. Soldiers from Tucson were sent to Mexico in the 1810s, to fight against the rebels. Mexico gained its independence in 1821. The Mexican government was unable to maintain the same level of spending, and support for the military at Tucson and Tubac declined, as did work at the nearby missions. The expulsion of foreign-born priests removed religious leaders from the region. The feeling of isolation was compounded by increasing Apache raids.



Ranches and mines were abandoned, followed by the missions. For a time in the 1840s, Tucson was the only occupied settlement. The passage of the Mormon Battalion, United States Army troops marching to San Diego in 1846, was seen as an ominous sign. The discovery of gold in California resulted in increased travel through southern Arizona in 1849 and 1850. Many of the forty-niners brought trade goods to exchange for food, and Tucson residents were eager to barter. Arizona south of the Gila River became part of the United States with the completion of the Gadsden Purchase in 1854; however, it was not until 1856 that American forces formally took control. Many Mexican residents of Tucson and Tubac remained behind and became American citizens. Thousands of modern-day Arizonans are descendants of people who lived in the region when it was the frontier of New Spain, and then Mexico.

Distinctiveness of Theme

No other existing or planned National Heritage Area is located on the United States-Mexico border or has a Spanish colonial theme. Although the area along the Santa Cruz River from Nogales northward has been a part of the United States for 150 years, the influences of Spain and Mexico remain strong. Communities are increasingly looking back and celebrating their Hispanic cultural heritage. Annual events, such as the traditional Christmas Mass at Tumacácori National Historical Park, recall celebrations that occurred 100 and even 200 years ago. Sonoran-style cuisine, which combines Spanish, Mexican, and local Native American influences, is available in many restaurants throughout the region. Local Spanish and Mexican heritage sites are receiving increased visitation as people seek a greater understanding of the unique history along the Santa Cruz River. No other National Heritage Area currently celebrates the contribution that Spain and Mexico made in what is now the United States.

Related Resources

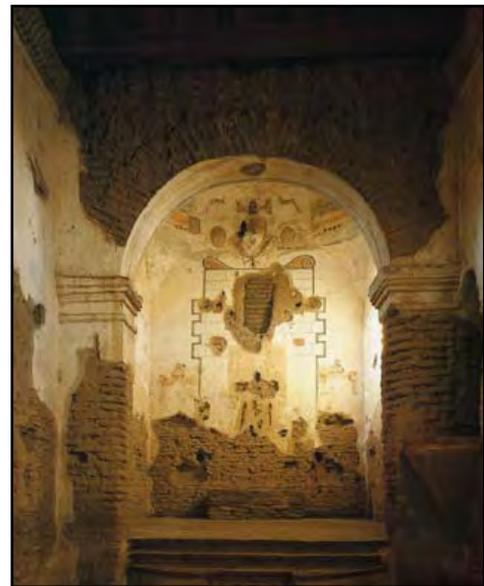
The missions of Tumacácori and Guevavi were established by Father Kino in 1691, and the visita of Calabazas was constructed in the 1750s. All three are part of Tumacácori National Historical Park. Guevavi was the location of a Piman village where Kino baptized local residents. In 1732, Father Grazhoffer became the first resident priest for the first church, which consisted of a brush roof on posts. An adobe church was being constructed at Guevavi when the 1751 Pima revolt began, and the site was abandoned by the Spaniards. A Spanish priest returned in December 1753. The Native American population of Guevavi gradually declined, and in 1771, Guevavi became a visita of Tumacácori. The complex was abandoned in 1775.

Calabazas was a visita of the mission of Guevavi in the 1750s. In 1760, a house was built and construction of a church begun. The church was still roofless in 1768, but was completed by 1773, when the Franciscans established a cemetery at the site. It was part of a rectangular compound with a central plaza. The church and other houses present at the visita were burned by Apaches in 1773, and the Pima abandoned the site in 1786. The church was later repaired in 1807, and served as a cattle ranch for the Tumacacori Mission until 1830, when it was again raided and burned by the Apaches. The land was acquired by Governor Gandara of Sonora in 1844, and was occupied by various people into the 1860s.

Tumacácori began as a visita of Guevavi and was moved to its present location in 1751. A large number of buildings were eventually constructed; however, the standing church was



Among the many heritage attractions in the Santa Cruz Valley are Spanish missions, presidios, and ranches dating between the 1690s and the 1820s.



begun in 1800 and completed in the 1820s. The mission was abandoned soon afterward and was only periodically reoccupied due to attacks by Apaches. The mission was made a National Monument in 1908, and was later designated a National Historic Landmark. It is open year-round to visitors. Guevavi and Calabazas were later added as separate units and can be visited during monthly tours.

The Presidio of Tubac was established in 1752, following the Pima Revolt the preceding year. About 50 soldiers were sent to build a fort at the location of a Piman rancheria. The presidio consisted of a cluster of structures centered around a Captain's House. An inspection in 1775 led to the presidio being moved north to Tucson. The village continued to be occupied, and military personnel were occasionally stationed in the community. The 1840s saw renewed attacks by Apaches, and for a few years, Tubac was abandoned. The arrival of Americans in the 1850s led to the revival of the village, which has developed into a tourist attraction today, with many shops selling artwork. The Tubac Presidio State Historic Park commemorates the presidio and includes an innovative underground archaeology display amid the ruins of the Captain's House.

San Xavier del Bac was the location of a Native American village; construction of the third church began in the 1780s, and was apparently completed in 1797. The Franciscan priest at San Xavier was deported in 1828, when the Mexican government ordered all foreign-born people sent back to Spain, and the mission remained without a resident priest for the next 30 years. The local Papago Indians removed the church furnishings and kept them safe until the return of Catholic officials in 1858. The Catholic church remains in use today. Recent efforts to restore the church have focused on cleaning the interior, exposing many paintings hidden beneath several centuries of smoke and dirt. Work on the exterior of the church includes replacement of concrete stucco with a re-creation of the original lime and cactus juice stucco, which will prevent water from becoming trapped in the walls of the structure. This church, widely considered to be the finest example of Spanish Colonial architecture in the United States, is open to public visitation.

The northernmost Spanish settlement along the Santa Cruz River was at Tucson. The Mission of San Agustín was on the western side of the river, while the Presidio of Tucson was across the river. Both survive as archaeological sites and have been heavily impacted during the historic and modern periods. Portions of the mission were destroyed by clay mining and use of the area as a landfill in the 1950s. Recent archaeological excavations have revealed that approximately 20 percent of the mission survives, along with the all of the nearby Mission Gardens. While nothing from the Tucson Presidio are visible, archaeological excavations have revealed that structure foundations and other archaeological features survive beneath streets, parking lots, sidewalks, lawns, and even buildings. The City of Tucson's planned Tucson Origins Heritage Park calls for the re-creation of selected structures at both locations. The prominent two-story convento and smaller chapel will be recreated at the mission, using historic photographs, drawings, and floor plans drafted by archaeologists in the 1950s. The northeastern corner tower and adjoining perimeter walls will be re-built at the presidio, slightly offset from the original wall foundations. Visitors will be able to view a portion of the 1780s tower wall and an underlying 1,000-year-old Hohokam pithouse in a unique glass display case. The mission and presidio re-creations will include museum exhibits and living history, with costumed docents teaching residents and visitors about daily life in eighteenth and nineteenth century Tucson.

The Juan Bautista de Anza National Historical Trail follows the western bank of the Santa Cruz River northward from the United States-Mexico border until it reaches the Gila River and turns westward toward California. The National Park Service is working with Pima County, Santa Cruz County, and the Anza Trail Coalition of Arizona on developing and linking segments of the trail, and marking them with signs. Segments extending for several miles have already been developed in the Rio Rico property and between Tumacácori National Historical Park and Tubac Presidio State Park.

Throughout the year, a variety of events celebrate Spanish and Mexican culture within the proposed Santa Cruz River National Heritage Area. The Fiesta de Los Vaqueros Rodeo and Parade takes place every February in Tucson, culminating in the largest non-motorized parade in the United States. Summer holidays include the Día de San Juan and the Fiesta de San Agustín, two Saint's Day festivals with roots extending back to the Spanish-era Tucson Presidio. Local residents gather for these two events and watch singers, folklorico dancers, processions, and enjoy Mexican food. Tucson's Birthday Celebration, the anniversary of the founding of the Tucson Presidio is celebrated at an annual flag-raising, attended by local residents dressed in historic costumes. Historical attire is required for attendance at annual traditional Latin

masses held at churches in Tubac and Tumacácori during the Anza Days Cultural Celebration and at Christmas, respectively. Toward the end of the year, the Nacimiento, a large miniature Christmas scene, is presented at the Cordova House within the Tucson Museum of Art Complex. Other events held during the year include Mariachi and Norteño music festivals and Cinco de Mayo celebrations. Attendance at these events has increased in recent years, as people seek out Mexican cultural experiences.

Spanish Barb Horses

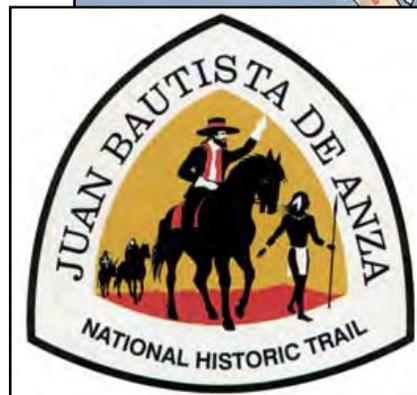
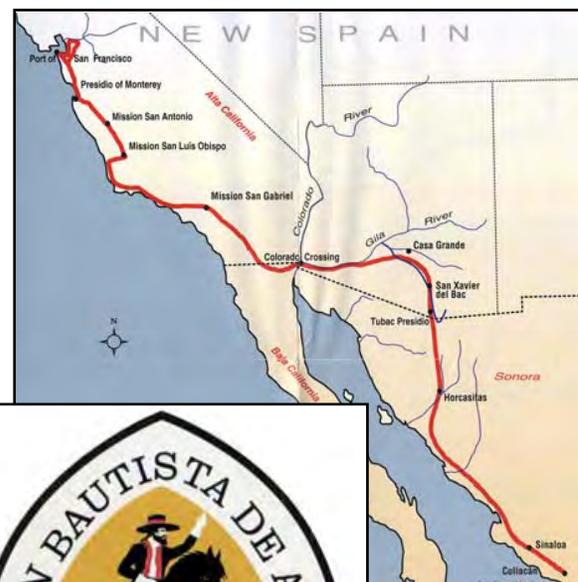
In the late 1680s, Father Kino established a herd of Spanish horses and other livestock at Mission Dolores in Sonora, Mexico, to supply the missions and ranches he was establishing throughout the Pimería Alta. In the 1690s, Kino brought horses from this herd to the Santa Cruz Valley, introducing them to the region. In the late 1870s, Dr. Rueben Wilbur purchased a breeding group of 25 mares and a stallion from the herd at Dolores, and allowed them to run wild on his ranch near Arivaca, in southern Arizona. This isolated herd was preserved by Dr. Wilbur's descendents.

In 1989, when the Wilbur ranch was sold to The Nature Conservancy to become part of the Buenos Aires Nature Preserve (and later, the Buenos Aires National Wildlife Area), the American Livestock Breeds Conservancy funded the distribution of the Wilbur-Cruce Mission



A centerpiece of this National Heritage Area will be the Juan Bautista de Anza National Historic Trail.

In 1775, Tubac was the final staging area for de Anza's expedition to colonize San Francisco.



strain among conservation breeders. The strain is now recognized in the registry of the Spanish Barb Breeders' Association.

Today, several strains of Colonial Spanish Horses, including these descendents of Father Kino's herds, have been preserved in the Santa Cruz Valley and other parts of the United States. Mostly or wholly extinct in Spain, and one of only a very few genetically unique horse breeds worldwide, they have both local and global importance for genetic conservation. The combination of exceptional disposition, great beauty, athletic ability, and historic importance makes this breed a very significant part of our Santa Cruz Valley heritage.

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DESERT FARMING (2000 B.C. TO PRESENT)

Summary of Theme

Archaeological evidence and historical records show that people have farmed in the Santa Cruz valley for at least 4,000 years, and have constructed canals to irrigate fields in the same locations for the last 3,000 years. This long agrarian history makes the Santa Cruz Valley one of the oldest continuously cultivated areas – and the place with the longest documented history of water control – in North America. Irrigation from surface flows stopped in the late 1800s and early 1900s, as water tables dropped and the river channel incised its floodplain in many places. However, irrigated farming has continued throughout the valley through groundwater pumping. Today, the main valley is still an important producer of cotton, wheat, pecans, and other crops. Native American crops are also being cultivated again with Colorado River water from the Central Arizona Project canal. Vineyards and fruit orchards have been recently developed in areas of the watershed with the right elevations and soils.

Description of Theme

The Riverine Oasis

Until the end of the nineteenth century, five reaches of the main channel of the Santa Cruz River contained water that flowed on the surface year-round. The uppermost perennial reach extended from the headwaters of the river in the San Rafael Valley, to San Lazaro in Sonora, Mexico. Downstream, the next perennial reach flowed from the United States-Mexico border to Canoa, although in summers and dry years, it stopped at Tubac. These upper perennial reaches occurred in areas with thin layers of alluvium overlying bedrock just below the surface, creating shallow aquifers with emergent flows. In these areas, canals could be built to divert the reliable surface flows to floodplain fields. Further downstream, in the middle Santa Cruz Valley, basalt dikes formed by the volcanic hills of Martinez Hill near San Xavier, Sentinel Peak (A-Mountain) near downtown Tucson, and Point of Mountain at the northern end of the Tucson Mountains forced the underground flow of the Santa Cruz River to the surface. This effect created marshes (cienegas) that were ideal for shallow ditches and wells intercepting the high water tables. Springs in the marshes could also be tapped, and downstream of the marshes, where the river flowed on the surface, water could be diverted into canals.

Early Farming and Water Control

The tropical crops maize (corn), beans, squash, and possibly cotton were introduced to the Santa Cruz Valley from Mexico between 2000 and 1000 B.C. Tobacco, probably a native variety, was also cultivated very early. Recent archaeological discoveries near Tucson have shown that, by 1200 B.C., early farmers built canals to divert both floods and perennial flows from the Santa Cruz River to their fields. These canals are the oldest examples yet found in North America and are more than 1,000 years older than any previously found in the Southwest. As early as 800 B.C., wells were dug in the Santa Cruz floodplain to tap high water tables. The logistics of irrigation required the cooperation of groups of farmers, which is probably why the Santa Cruz Valley had some of the earliest village communities in the Southwest.

Hohokam Agriculture

A number of canals built by the Hohokam between about A.D. 500 and 1450, have been discovered in the middle Santa Cruz Valley in recent years. These canals were smaller than the major Hohokam canals in the Phoenix Basin, but rivaled them in their skillful engineering. They were generally larger than those built by earlier farmers in the Santa Cruz Valley. Most of the Hohokam canals in the valley were constructed between roughly A.D. 950 and 1100, coinciding with the peak in Hohokam canal building in the Phoenix Basin. During this period, new varieties of maize, beans, squash, cotton, and tobacco were introduced from Mexico, and native plants such as tepary bean, agave, little barley, panic grass, and devil's claw were locally domesticated. After approximately A.D. 1100, perhaps in response to downcutting of the river channel in several areas, extensive areas on the bajadas above the Santa Cruz floodplain were developed for runoff farming. Archaeological investigations have shown that the rock piles and terraces in these new fields were used primarily for cultivating agave (mescal).

Sobaipuri Ditches and Spanish Acequias

In 1691, Father Kino and Father Juan María de Salvatierra, the first Europeans to explore the Santa Cruz Valley, traveled as far north as the Sobaipuri Pima (O'odham) village of Tumacácori, then south through Guébavi (Guevavi) and Santa María (also the name of the Santa Cruz River at that time). The following year, Kino traveled farther north to the O'odham village of Bac, and it was probably on that trip that he first visited the village of Chuk-shon (from which Tucson derives its name) near the foot of what is now called A-Mountain. In both locations, he saw many irrigation ditches. Between A-Mountain and the Rillito, on the eastern bank of the river, the inhabitants of the village of Oiaur also irrigated crops in the floodplain.

These irrigated areas supported sizeable populations. On 23 November 1697, the Spanish explorer Captain Juan Mateo Manje was traveling with Father Kino and described the scene in his diary: ". . . after going six leagues, we came to the settlement of San Agustin del Oiaur. . . Here the river runs a full flow of water, though the horses forded it without difficulty. There are good pasture and agricultural lands with a canal for irrigation." He counted 750 people in 186 houses, and at San Xavier, another 830 inhabitants were subsisting from irrigated fields. In 1699, Father Kino described the irrigated agriculture at San Xavier (and exaggerated its potential): "The fields and lands for sowing were so extensive and supplied with so many irrigation ditches running along the ground that . . . they were sufficient for another city like Mexico."

Father Kino and other Jesuit missionaries introduced wheat, fruit trees, and many other Old World crops. In contrast to native summer crops, wheat grew in the winter, an otherwise lean season in the annual food supply. Thus, winter wheat filled a gap in the agricultural cycle and allowed the O'odham to farm year-round. Its wide adoption had a major impact on the native agriculture and diet in the valley. Kino also introduced cattle, horses, sheep, and goats, which added livestock ranching to the local economy.

In the late 1730s, a mission farm and ranch was established at the O'odham village of Tchuvaca (later called Tubac), then a visita of the priest at Guevavi. Under Spanish overseers, the O'odham residents of Tubac cultivated both native and introduced crops and raised cattle, sheep, and goats. After a presidio was established there in 1752, Spanish soldiers and colonists

built a more extensive system of irrigated fields. A 1766 map of Tubac shows the main acequia diverting water from the Santa Cruz River to irrigate fields, and then returning the remaining water to the river. Historical documents also show that the O'odham mission at Tumacácori had to share its water with the downstream presidio at Tubac. The presidio's commander, Captain Juan Bautista de Anza, instituted a weekly water rotation in the 1770s.

The mission established at San Cosme (the first Spanish name for Tucson) in the 1750s included irrigated gardens and orchards by the 1770s, and the Sobaipuris and Papagos (now Tohono O'odham) living in the vicinity also irrigated fields on the western side of the river. A 1780 map shows a dam diverting water from the Río Santa María (the first Spanish name for the Santa Cruz) into an acequia (canal) through the mission at San Agustín (the mission's name after the 1770s, until it was abandoned in 1831). After the Tucson Presidio was built on the eastern side of the river, where downtown Tucson is today, the eastern floodplain was also irrigated by Spanish settlers. Increasing competition for the water of the river led to a 1776 agreement that guaranteed three-fourths for the Indian villages and one-fourth for the presidio. In the 1790s, however, the Indians' share was reduced to half.

Mexican Irrigation Communities

After Mexico gained independence from Spain in 1821, and new settlers began to arrive from the south, the traditional Sonoran system of irrigated agriculture was established on the banks of the Santa Cruz in Tucson. Mediterranean winter crops of wheat, barley, chickpeas, lentils, onions, and garlic followed native summer crops of maize, beans, squash, pumpkins, chili peppers, tobacco, and cotton. The three acequias madres (mother canals) were maintained as common property by a *común de agua* (irrigator community), and an elected *zanjero* (overseer) supervised water distribution.

The irrigation schedule was flexible, with water turns arranged according to varying crop needs, and water shortages were shared proportionally. First use of water was reserved for fields south of what is now St. Mary's Road, while fields to the north were irrigated only during relatively wet years. This northern area grew hay and was used as pasturage for cattle. The canal alignments, field boundaries, and property lines of this traditional irrigation system are recorded on a map surveyed during the Civil War by the United States Army. Below the modern ground surface, archaeologists have recently found some of the canals shown on that 1862 map.

In the Santa Cruz Valley south of Tucson, Mexican ranchers irrigated cattle pastures. In 1849, Jose Maria Martinez, former commander of the Tucson Presidio and a famous Apache fighter, cleared land east of San Xavier, on the western side of the river, and cut a ditch to the spring called Punta de Agua. The Acequia de Punta de Agua irrigated a field west of what became known as Martinez Hill, and the Agua de la Misión acequia irrigated O'odham fields at the mission.

American forty-niners passing through the area on their way to the California gold fields described the farmlands near Tucson and San Xavier as "rich and fertile to the extreme." In 1852, John Russell Bartlett, conducting a survey of the new border after the Mexican-American War, was impressed by the scene that greeted him in Tucson: "irrigating canals in every direction, the lines of which are marked by rows of cottonwoods and willows, presenting an agreeable landscape."

Early Anglo Water Development Schemes

The 1854 Gadsden Purchase opened the territory south of the Gila River to Americans, and newly arriving Anglos impounded the river at several points to provide heads of water to power flour mills. The remains of Solomon Warner's mill, built in the 1870s, can still be seen at the base of A-Mountain at the western end of Mission Lane. Agriculture was the next focus of Anglo attempts to profit from water development (although Hispanic businessmen were also partners). In the early 1880s, Samuel Hughes, W. C. Davis, and Leopoldo Carillo purchased floodplain land upstream of the traditional fields. They cleared them for new fields and excavated new, deeper ditches to increase the water supply to the vegetable gardens of their tenants, mostly Chinese who had arrived in the 1870s.

The impounding of water in reservoirs and the increased water use by the upstream entrepreneurs diminished the supply to downstream Mexican-American farmers, who fought for their water rights in court. However, in an 1884-1885 court ruling, the western United States law of prior appropriation was determined to supercede local customs. This ruling marked the beginning of the end for the traditional system of irrigated agriculture in Tucson.

In place of the irrigation community, corporations competed for the river's water. By 1891, 33 new ditches, comprising a total length of 56 miles, had been constructed in the Santa Cruz floodplain by corporate enterprises. In 1881, Sylvester Watts dug several wells on his property south of town and built a wooden flume in the bed of the river. Several additional wells near Eighteenth Street and Osborne Avenue supplemented this water supply, and an aboveground pipe was built to carry the water into town by gravity flow. The then-private Tucson Water Company began to provide water to homes and businesses on 6 September 1882.

Downcutting of the River through Tucson

During the swirl of land speculation and water development schemes in the late nineteenth century, the current form of the Santa Cruz River, a dry bed up to 20 ft below the top of the banks, was created by a combination of human error and natural disasters. Attempting to increase the water supply to his fields on the western side of the Santa Cruz River north of Saint Mary's Road, Sam Hughes constructed a new, deep ditch in 1887, to intercept the subsurface flow of the river. Large floods over the next four years caused the ditch to downcut to the water table lowered by drought and overgrazing, and caused the headcut to rapidly erode upstream (southward). Steady progression of the headcut and the channel's increasing width were reported with alarm in the newspaper. By 1910, the headcut had coalesced with another downcut segment near San Xavier, resulting in a deeply incised river channel through much of the middle Santa Cruz Valley. The effect on irrigated agriculture was disastrous. The downcutting of the main channel stranded canal intakes above the river, and other flood channels severely damaged canals.

New Waterworks for Tucson

In 1891, Frank and Warren Allison began work to repair the irrigation system on the western side of the river near Tucson. By 1895, they built a new reservoir near the old Warner Dam site and a large ditch that extended north to what is now Congress Street. The project was initially a success, but soon, their 1,160 acres of fields were accumulating crop-damaging salts as a result of intensive, uninterrupted irrigation. In 1895-1896, the Allisons built a new, 12-ft-wide

canal on the eastern side of the river after much of their west side land became too salinized for agriculture. From their new 10- to 15-ft-deep artesian wells at the foot of A-Mountain, the brothers built a wooden flume that carried water across the river to the eastern bank. The water in this 5-mile-long East Side Canal also powered a new flour mill just north of what is now Speedway Boulevard. It then irrigated their land to the north, which they called Flowing Wells after a new source of water they located there. The Tucson Canal Company, incorporated in 1896, financed the construction of another canal south of the Allison's, tapping a source near the San Xavier mission.

In 1902, the Allison's sold their property to Levi Manning, a surveyor and businessman who became Tucson's mayor in 1905. He further developed the well field below Sentinel Peak, drilling new wells to tap the now 20-ft-deep subsurface flow of the river. The East Side Canal soon became known as Manning's Ditch. By 1910, four main canals fed by Manning's wells were irrigating the floodplain west of Tucson.

A group of Chicago and British investors bought part of Manning's land in 1911. Upstream of Manning's Ditch they developed the "Crosscut" – a line of 19 new wells across the floodplain, ranging from 45 ft to 150 ft deep and connected underground by a horizontal shaft. Calling themselves the Tucson Farms Company, they also installed electric pumps, replaced the old flume across the river with a 4-ft-diameter concrete siphon below the riverbed, extended Manning's Ditch to a total length of 7 miles, lined some canal segments with cement, and added reinforced concrete headgates, drop structures, and lateral turnouts. The company peddled the land to Midwestern farmers for \$200-300 per acre, but it was not a financial success. In 1922, a group of farmers formed the Flowing Wells Irrigation District and assumed control of the Crosscut and distribution system. A large flood in 1940 destroyed most of these waterworks, bringing an end to irrigated agriculture in the middle Santa Cruz Valley near Tucson.

The Plantations of Continental

During World War I, the supply of natural rubber from Asia was interrupted. President Woodrow Wilson asked businessmen Joseph Kennedy, Sr., J. P. Morgan, and Bernard Baruch to help the war effort by growing guayule, a native Southwestern shrub that yields latex, the raw material for rubber. The group purchased 9,700 acres in the northern part of Canoa Ranch, in the middle valley south of Tucson, from Levi Manning in 1916. The new Intercontinental Rubber Company drilled deep wells for irrigation water, constructed processing facilities, and built housing for workers in the new village of Continental. When the war ended, guayule was no longer needed and production ended before rubber was successfully extracted in large quantities.

From 1926 to 1937, Continental Farm was leased to grow long-staple cotton. Itinerant workers were trucked in each fall from Texas, and then returned to Texas after the harvest. During World War II, a prisoner of war camp was built on the farm, and some 40 German POWs worked in the fields. Sometime prior to 1945, Queen Wilhelmina of The Netherlands purchased a controlling interest in the farm from the original trio of businessmen, and continued to cultivate cotton. In 1950, the queen sold her land to the Farmer's Investment Company (FICO), established by Keith Walden and Henry Crown in 1942. FICO doubled the cotton planting to 3,400 acres in 1952, and then rotated cotton with barley and corn, and experimented with Spanish peanuts, vegetables, and wine grapes. Between 1965 and 1969, Continental Farm

planted 400,000 pecan trees on 5,000 acres after a wind-borne fungus damaged the cotton fields. The trees first started to produce pecans in 1970. Today, FICO cultivates some 4,500 acres of pecan trees – the largest irrigated pecan orchard in the United States.

The Rise of Cotton Farming in Marana

Originally a ranching and mining community along the Southern Pacific Railroad, Marana became primarily an agricultural center after World War I. In 1920, newcomer Edwin R. Post drilled a number of wells and constructed an extensive irrigation system. Many families migrated to the area to cultivate cotton between 1920 and 1924, and for a short time, the growing community was called Postvale. Wheat, barley, alfalfa, and pecans have also been cultivated since the 1940s, although the majority of Marana farmland has always been devoted to cotton. Since the 1980s, the amount of farmland has declined as farms have been converted to housing developments, but the area still has about 15 cotton farms. Durum wheat is exported to Italy for making pasta and is increasing in importance.

Agricultural Research and Crop Conservation

Since the Hatch Act of 1887 created the agricultural experiment station program, the University of Arizona (UA) has conducted research on arid land crops, irrigation, and range management in the Santa Cruz Valley. Currently in this region, the UA College of Agriculture operates the 200-acre Marana Agricultural Center, the 185-acre Campus Agricultural Center in Tucson, the 72-acre West Campus Agricultural Center, and the 50,811-acre Santa Rita Experimental Range southeast of Sahuarita.

Since 1983, the nonprofit Native Seeds/SEARCH organization based in Tucson has worked to prevent loss of crop biodiversity by conserving, documenting, and distributing traditional varieties of crops and their wild relatives in the Greater Southwest. They currently maintain a seed bank of 2,000 varieties of arid land-adapted crops and operate a 60-acre conservation farm near Patagonia where seeds are regenerated and crop varieties are evaluated. The organization also promotes traditional desert foods to combat diabetes among Native Americans, and works with federal agencies on conservation research in the 2500-acre Wild Chile Botanical Area within Coronado National Forest west of Tumacácori National Historical Park.

Using part of its water allotment from the Central Arizona Project canal, the San Xavier District of the Tohono O'odham Nation has also begun cultivating tepary beans, squashes, and other traditional crops on its Farming Co-op. The Kino Fruit Trees Project – supported by the National Park Service, the Arizona-Sonora Desert Museum, Desert Survivors Nursery, and Native Seeds/SEARCH – is identifying and collecting fruit trees in southern Arizona and northern Sonora, Mexico, that are descended from stocks introduced during the Spanish Colonial period.

The project will eventually replant the historical orchards at Tumacácori National Historical Park and the gardens of the San Agustín Mission that are being reconstructed by the City of Tucson. A variety of grape introduced to the Southwest during the Spanish period is also being cultivated by wine vineyards near Sonoita and Elgin.

Distinctiveness of Theme

The development of desert farming in the United States is a unique theme among existing National Heritage Areas. With its 4,000-year history of agriculture that continues today, and its many active crop conservation and reintroduction programs, this region is well-suited to interpret this theme through the framework of a National Heritage Area. Such a designation will create new opportunities for preservation of traditional crops and education of residents and visitors about the long agricultural history of this region.

Related Resources

Santa Cruz Valley residents and visitors have many opportunities to experience and learn about the agricultural heritage of this region. A number of farmers markets, pick-your-own farms, and research and conservation farms are open to the public. Grocery stores, delis, and specialty shops sell local foods, including wines, pecans, Mexican spices, cactus fruit products, desert wildflower honey, and others. Annual harvest festivals are held at wineries in Elgin. The Town of Marana is currently planning a Marana Heritage Park to interpret the agricultural history of this region. The Tucson Origins Heritage Park, being developed by the City of Tucson, will also have exhibits and gardens highlighting this theme. Tumacácori National Historical Park is working with local nonprofit groups on a project to replant its historic orchard with fruit trees descended from Spanish period stock. Many local companies sell local foods, including wines, pecans, spices, cactus fruit products, mesquite honey, and others.

Farmers Markets in the Proposed National Heritage Area

- ◆ Community Food Bank Farmers' Market, Tucson, Saturdays and Tuesdays 8:00 a.m.-12:00 p.m.
- ◆ Downtown Farmers' Market and Arts and Crafts Mercado, Tucson, Wednesdays 8:00 a.m.-1:00 p.m.
- ◆ Fresh Fridays, El Con Mall, Tucson, Fridays 1:00 p.m.-5:00 p.m.
- ◆ Horse Country Farmers' Market, Tucson, Saturdays and Sundays 10:00 a.m.-4:30 p.m.
- ◆ Main Gate Square Sunday Farmers' Market, Tucson, First Sunday of each month, 10:00 a.m.-2:00 p.m.
- ◆ Oro Valley Farmers' Market, Oro Valley, Saturdays 8:00 a.m.-12:00 p.m.
- ◆ Plaza Palomino Saturday Market, Tucson, Saturdays 9:00 a.m.-1:00 p.m.
- ◆ Rincon Valley Farmers' Market, Pima County, Saturdays 8:00 a.m.-1:00 p.m.
- ◆ Sonoita Growers Market, Sonoita, Saturdays, 9:00 a.m.-12:00 p.m., May-August
- ◆ St. Phillip's Plaza Farmers' Market, Tucson, Sundays 8:00 a.m.-1:00 p.m.

Pick-Your-Own Farms in the Proposed National Heritage Area

- ◆ Agua Linda Farm, Amado
- ◆ Douglas Apple Orchard, Elgin
- ◆ Forever Yong Farm, Amado
- ◆ Howard's Orchard, Catalina

Wineries in the Proposed National Heritage Area

- ◆ Arizona Vineyards
- ◆ Callaghan Vineyards, Sonoita
- ◆ Charron Vineyard, Vail
- ◆ Dark Mountain Winery, Vail
- ◆ Sonoita Vineyards, Sonoita
- ◆ Village of Elgin Winery, Elgin

Research and Conservation Farms in the Proposed National Heritage Area

- ◆ Campus Agricultural Center, University of Arizona, Tucson
- ◆ Marana Agricultural Center, University of Arizona, Marana
- ◆ Native Seeds/SEARCH Conservation Farm, Patagonia
- ◆ San Xavier District Farmers Co-op
- ◆ Santa Rita Experimental Range, University of Arizona, Pima County
- ◆ West Campus Agricultural Center, University of Arizona, Tucson

Annual Planting and Harvest Festivals in the Proposed National Heritage Area

- ◆ Autumn Harvest Festival, Tucson
- ◆ Blessing of the Seeds, Native Seeds/SEARCH Conservation Farm, Patagonia
- ◆ Blessing of the Vineyards Festival, Elgin
- ◆ Blessing of the Harvest Festival, Elgin

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RANCHING TRADITIONS (1680 TO PRESENT)

Summary of Theme

Our common ground—our ranchlands—are what have best preserved, as well as shaped, the vast natural and cultural landscape of the Santa Cruz Valley. Sweeping open spaces, recreational areas, refuge from the city, and home to sensitive biological systems and traditional rural communities are all the result of ranching, an extensive rather than intensive use of the land in the arid Southwest. Since the introduction of cattle, horses, and other livestock in the 1680s and 1690s, with the first Spanish *entradas* to establish ranches, mission communities, and military forts in the Santa Cruz Valley, ranching and farming have continued to be two mainstays of the rural economy for more than 300 years.

Most of the earliest cattle ranches in the Santa Cruz Valley were established at mission communities, but the Spanish and later Mexican governments also offered substantial land grants to civilians in an attempt to create wealth and a tax base, by attracting settlers to increase the population and productivity of the region and to expand their claims. Despite these efforts to develop the ranching potential of the area, few settlers actually lived on their land grants for long due to the ongoing threat of Apache attacks. Instead, many ranchers lived in military or mission communities for defense, only venturing out occasionally to visit their ranches and to assess their livestock. This pattern of settlement and ranching persisted until the American Territorial period, when ranchers began to move onto their ancestors' land grants. With the opening of the West after the Civil War, American and Mexican ranchers established new ranches and homesteads throughout the region, often sharing labor and mutual assistance. Today, the interplay of Hispanic, American, Mexican, and Native American ranching continues this historical and living tradition, providing a link to the past and to the future.

Description of Theme

Spanish Colonial and Mexican Periods and Land Grants

Ranching traditions in the Santa Cruz Valley derive from ancient traditions of domesticated cattle and livestock raising, which originated in the Old World from nearly the dawn of history. Remarkably, little is known about early Old World cattle. While they became basic to the economy of Eurasian civilizations, few writers found much to record about these mundane beasts. One thing that can be said with certainty is that by the early modern era, European cattle, although only one species, had attained a great variety of regional variation.

It is to the Spanish, adapting to conditions of the New World, that we owe much of the character of ranching in the American West. Although changed in numerous ways, the ranching today that serves a modern American market is also shaped physically and culturally by traditions brought by those first Spanish settlers. The institution of cattle ranching developed quickly in New Spain. The Spanish government knew that by encouraging cattle raising, its colonies would have a strong economic base. By 1600, cattle in the New World numbered in the hundreds of thousands. The first cattle ranch in the Santa Cruz Valley was established about 1680, by José Romo de Vivar, near San Lázaro in what is now the Mexican state of Sonora.

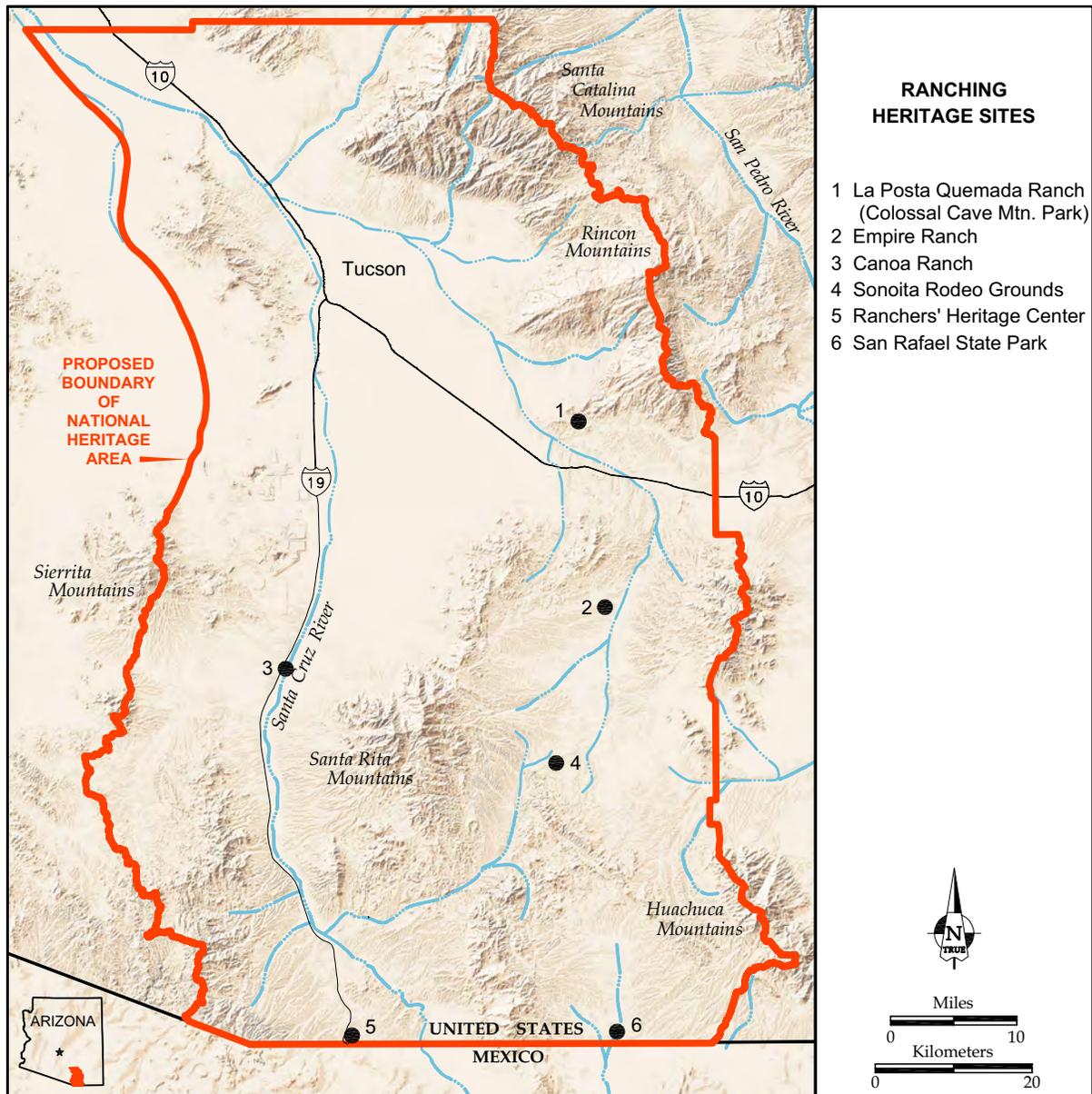
In 1591, missionaries of the Society of Jesus, the Jesuits, began their slow efforts at Christianizing the Indians in New Spain's northwestern frontier, also known as the Pimería Alta, which includes the Santa Cruz Valley. The most famous missionary in this region was Father Francisco Eusebio Kino, who brought cattle in large numbers to his missions. They would be the mainstays of the mission economies and a major attraction for Indian converts. He established numerous *visitas* (mission stations without resident priests) in northern Sonora and Arizona between 1687 and 1711, including Tumacácori, Guevavi, and San Xavier del Bac. Later, following the Piman Revolt of 1751, cattle ranching became focused at the military presidios of Tubac and Tucson.

In 1769, California was threatened by Russian settlement, and in 1773 and 1775, Juan Bautista de Anza led two expeditions to California from Tubac. Sixty-five cattle provided food on the hoof for the first expedition along the Camino del Diablo, or Devil's Highway. The second expedition included some 240 people, 695 horses and mules, and 355 cattle, who made the long journey to establish San Francisco along a different route, now commemorated as the Juan Bautista de Anza National Historic Trail.

Cattle ranching dominated other activities such as farming or mining in the Spanish colonial economy of this era. Large land grants helped establish the Elias, Ortiz, Herreras, and other Hispanic families permanently in southern Arizona. Petitions by settlers to both Spain and Mexico resulted in 18 land grants that would later become the focus of land ownership disputes following the Gadsden Purchase of 1854, which brought the Santa Cruz Valley into the United States. Tomas and Ignacio Ortiz received a large land grant at San Ignacio de la Canoa along the Santa Cruz River in 1821, and the Ortiz brothers acquired another grant at Arivaca in 1833, as shown in Table 4.4.

Table 4.4. Spanish Land Grants in the Santa Cruz Valley and other parts of Southern Arizona (from Walker and Bufkin 1986).

Name of Land Grant	Acreage Claimed	Acreage Approved or Rejected
Tumacácori/Calabazas	81,350	Rejected
San Ignacio de la Canoa	46,696	17,204
Buenavista (María Santísima del Carmen)	17,354	5,733
San José de Sonoita	7,593	5,123
El Sopori	141,722	Rejected
San Rafael de la Zanja	152,890	17,352
Aribaca	8,677	Rejected
Los Nogales de Elías	32,763	Rejected
San Bernardino	13,746	2,383
San Ignacio del Babocomari	123,069	33,792
Tres Alamos	43,385	Rejected
San Rafael del Valle	20,034	17,475
Agua Prieta	68,530	Rejected
Ranchos de las Boquillas	30,728	17,354
San Pedro	38,622	Rejected
Algodones	21,692	Rejected
Otero (Tubac Claim)	1,199	Claim not filed
Total	850,050	116,416



Ranching heritage sites in the proposed National Heritage Area.

The early years of the Mexican Republic saw turmoil throughout the country. Warfare continued, and by the 1840s, most Mexican ranches in the Santa Cruz Valley were abandoned and cattle herds grew wild. American travelers through Arizona in the 1840s reported vast herds of wild cattle, and range conditions were noted as excellent. However, by the 1850s, wild cattle were exterminated from the Arizona range. The cause was simply the continuous slaughter of wild cattle by Apaches, American soldiers, civilians, and gold-seekers crossing Arizona in the 1850s. These forces overwhelmed the natural ability of the animals to reproduce.

An era had literally come to an end, but it is clear that the introduction of cattle and other livestock during the Spanish and Mexican periods forever changed the Native population and created a legacy of cattle ranching and traditional land uses in the Santa Cruz Valley.

While the Spanish and Mexican land grants created numerous legal entanglements to be resolved under American rule, the land grants also shaped land ownership and tenure that continues today.

While ranching was in a period of transition, it was about to become an ever more critical industry that would affect even greater change in Territorial Arizona, with the advent of the American period.

American Territorial Period and Homesteading

Through the 1850s, Arizona was a little more than a passageway for gold seekers and emigrants traveling to California. In the late 1850s, the Butterfield Overland Stage Company opened regular services across the desert Southwest, followed, in 1880, by the completion of the Southern Pacific transcontinental railroad line through Tucson and Pima County. People trailed their cattle and oxen (steers) along with them.

Through the 1850s, until the start of the Civil War, herds of Texas longhorns passed annually across southern Arizona on their way to California. A popular writer, J. Ross Browne, traveled across Arizona in 1864, and commented that the Gándara or Calabasas ranch was

...one of the finest in the country. It consists of rich bottom lands and rolling hills, extending six leagues up and down the Santa Cruz River by one league in width, embracing excellent pasturage and rich arable lands on both sides. . . At present, however, and until there is military protection in the country, it is utterly worthless, owing to the incursions of the Apaches.

Trailing Texas cattle across to California accounted for most of the industry's activities during the 1850s. One of the first Americans to establish a permanent ranch in the Santa Cruz Valley was Pete Kitchen. Realizing the potential of the grasslands along the Santa Cruz River, Kitchen decided to try ranching on Potrero Creek, which empties into the Santa Cruz just north of Nogales. The adobe headquarters he built were practically a small fortress, and defense against hostile Apaches proved a great challenge. When federal troops were withdrawn from the territory at the beginning of the Civil War, Kitchen, almost uniquely, managed to hold onto his ranch.

Along Cienega Creek, a tributary of the Santa Cruz River, is a broad expanse of rolling hills, and good grass and permanent water that attracted cattlemen and sheepmen early. D.A. Sanford and Tom Gardiner started some of the first small ranches in the area. Other names of early ranchers in the valley include Wakefield (1870s), Hilton (1877), and O'Leary (1880). In 1880, the Cienega Ranch ran 1,000 cattle and 23,000 sheep. Big money and big ambitions moved into this area in 1876, when Walter Vail, in partnership with two Englishmen, bought the 160-acre Empire Ranch and 612 cattle. Vail bought surrounding ranches until his spread lived up to its name. Up to 50,000 cattle grazed on the Empire at its height, and Vail controlled nearly 1000 mi² of range, stretching from the Mexican border to the Rincon Mountains. Vail understood that to get a good return in Western ranching, one had to make sizable investment in land, cattle, and improvements. The Empire and Cienega ranches continue as working ranches today.

Another of the great cattlemen of southern Arizona was Colin Cameron. He and his brother Brewster made a fortune in banking and railroading, and in 1882, they started ranching in the

Santa Cruz Valley in a big way, purchasing the San Rafael land grant. Cameron built a veritable palace on the range, and from it, he ruled over a ranch that dominated 600,000 acres. The San Rafael, also, continues as a working ranch today, with part of it being developed as San Rafael State Park and Natural Area.

It is important to note that the arrival of American ranchers into the Santa Cruz Valley did not end the importance of Hispanics in the ranching business. With the decline of Indian warfare, the Otero, Pacheco, Elías, Ruelas, León, Ortiz, Ramírez, Amado, and other old families returned to ranching. Newcomers from Mexico included the Carrillo, Aguirre, Robles, and Samaniego families. Many others earned their living working on ranches all across Arizona.

While there had been many relatively dry years from the 1860s through the 1880s, the great drought of the 1890s was particularly tragic and had a significant effect on the landscape. The number of cattle, as well as other forms of livestock, increased to record highs by 1890. After 1893, the number of cattle declined, but overgrazing had significantly changed the landscape.

The Start of the Modern Cattle Industry

The disastrous drought of 1891-1893 forced ranchers who wanted to stay in the business to reorganize and take a different approach to cattle raising. In the 1880s, ranchers tried to raise and feed the largest herds for sale to the beef markets of California and other parts of the nation. In the new cattle business, Arizona ranchers increasingly specialized in breeding superior beef animals and then shipping them to other states for fattening. On the range, a system of paying grazing fees for use of the public domain institutionalized the stockman's right to use the land. With long-term use of the land assured, ranchers could make capital improvements by building water tanks and fences. By limiting the number of cattle, investing in the land, and practicing good management, ranchers ultimately created the conditions for a gradual recovery of the land and their herds.

The open range gave way to stock raising as a modern business enterprise. Ranches in the Santa Cruz Valley continued in operation, despite earlier setbacks, by using a mosaic of grazing leases, including private homesteads, and Forest, State, and Bureau of Land Management lands. Numerous small ranches were consolidated, and some of the large ranches operating in the Santa Cruz Valley included the Empire and Cienega ranches, the Babocomari Ranch, Sopori, San Ignacio de la Canoa land grants, San Rafael, Buena Vista, El Potrero, Rhodes Ranch, Reventon, Amado, Moyza Ranch, Rancho Seco, Santa Lucia, Arivaca Ranch, McGee Ranch, Santa Rita Ranch, Steam Pump, and others. Many of these ranches continue in operation today.

Both World War II and the postwar years saw a great boom in the cattle industry. The typical ranch in the Santa Cruz Valley was a cow-and-calf outfit, producing calves and yearlings for fattening elsewhere in the country. On the land, both private and government efforts and ranchers themselves had developed springs, wells, concrete dams, and thousands of earthen tanks to assure a ready supply of water. Where range cattle in the pioneer era relied on natural sources of water, by 1950, it was said that cattle rarely had to travel more than 2 miles to find water.

When World War II ended, Tucson and the Santa Cruz Valley entered a new time of transition – from a small Southwestern city with an agricultural base to a growing metropolitan area,



Another unique theme for the National Heritage Area will be cattle ranching, one of the primary land uses in Santa Cruz Valley for more than three centuries.



whose growing population was estimated to increase at a rate of 1,000 people per month. From a population of 32,500 in 1930, the Tucson metropolitan area has grown to about 213,000 in the 1960s, or 555 percent in 30 years. The Tucson metropolitan area currently has about 850,000 residents; however, it is those remaining ranches, their grazing leases, and public land preserves that form the urban boundary and preserve our ranching traditions in the Santa Cruz Valley, as well as our natural and cultural landscape – our common ground.

Distinctiveness of Theme

While ranching is certainly a way of life that continues throughout the West, the high desert grasslands of the Santa Cruz Valley has always been a cultural crossroads on the frontier of settlement, where ranching has so profoundly shaped our cultural and natural landscape, land-use patterns, economic development, urban form, cultural composition and traditions, and self image. Deeply rooted in the Spanish Colonial, Mexican, and American Territorial periods, ranching has been the primary land use of the Santa Cruz Valley for 300 years, whether along the actual course of the Santa Cruz River or along its tributaries and mountain uplands. Ranching today persists as testimony to those Spanish missionaries who introduced cattle, horses, and other livestock, Hispanic and Mexican settlers who established land grant ranches, American families who homesteaded lands that continue in family ownership today, and to all those who endured the many hardships of ranching on the frontier in a harsh environment. Descendants of these explorers, pioneer settlers, adventurers, soldiers, and even the

descendants of Spanish horses and cattle, continue a living tradition and a living landscape in the Santa Cruz Valley that is like no other in the nation.

Related Resources

Santa Cruz Valley residents and visitors can learn about the long history of ranching in this region and experience working ranches by visiting the Empire Ranch in the Cienega Valley and La Posta Quemada Ranch at Colossal Cave Mountain Park near Tucson. Pima County is restoring historic ranch buildings and developing interpretive exhibits at Canoa Ranch, and Arizona State Parks is restoring the historic Cameron ranch house at the new San Rafael State Park. The Ranchers' Heritage Center in the 1904 Courthouse in Nogales has exhibits about the history of ranching in this region. The Sonoita Quarterhorse Show showcases the most famous horse breed of this region. The rodeo traditions of the Santa Cruz Valley are celebrated at the annual Fiesta de Los Vaqueros Rodeo and Parade, and also the Sonoita Rodeo, among the oldest rodeos in the country.

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MINING BOOMS (1680 TO PRESENT)

Summary of Theme

Historically, one of the most important economic activities in the proposed Santa Cruz Valley National Heritage Area was mining of precious metals. Gold and silver mining began with the arrival of the first Spanish colonists during the late seventeenth century. However, historians have concluded that the legends of lost mines and treasures of early missionaries are nineteenth-century fabrications, and that mining was not of major importance on this part of the Spanish and Mexican frontiers. Mining became more important after the region became part of the United States in 1854. Repeated mining rushes for gold and silver created boomtowns that briefly flourished and were then abandoned because of dangers of Apache attacks, sudden drops in the market values of the metals, or depletions of quality ores. Although a few gold discoveries received a great deal of interest, silver was the main metal that was mined.

At the end of the nineteenth century, a collapse in the value of silver and the new demand for electrical wire shifted the focus to copper mining. For more than 100 years, the region has been one of the most important producers of copper in the world. Copper mining in the Santa Cruz Valley has also experienced many up and down cycles, but it continues to be important today. While copper mines are increasing production again, ghost towns and old mines throughout the region are visible reminders of numerous mining booms and busts over several centuries.

Description of Theme

Spanish Period Mining

The search for precious metals was one of the drives behind the northward expansion of the frontier of New Spain, including the Santa Cruz Valley. Contrary to legends that have circulated since the mid-nineteenth century, the earliest missionaries who worked in the Santa Cruz Valley between the 1690s and the 1760s probably did not do any mining in this region or elsewhere in New Spain, because they were forbidden by their Jesuit order. The first Spanish miner in this region was probably José Romo de Vivar, who established a ranch at San Lázaro on the upper Santa Cruz River in about 1680; he also founded the mining town of Bacanuchi 50 miles to the southeast.

A large number of Spanish prospectors were attracted to the region in 1736, when the unusual Planchas de Plata (Slabs of Silver) discovery was made near the Tohono O'odham village of Arizonac (from which the territory of Arizona took its name in 1863). In this location—about 1 mile south of what became the United States-Mexico border, and not far west of the twin border cities of Nogales—156 arrobas, or a little over 2 tons of silver, were removed from the ground surface in a short amount of time.

Early historical documents also record that Spanish colonists were mining gold and silver deposits in the Santa Rita Mountains and in the area of the Guevavi mission before they fled during the Pima Revolt of 1751. Although colonists returned to the valley after a presidio was established at Tubac the following year, the Santa Cruz Valley was largely abandoned again during the 1760s, due to increasing Apache attacks. Some settlers returned during the 1770s,

and resumed work in some of the silver mines in the Santa Rita Mountains, introducing the amalgamation method of processing silver ore with mercury.

A presidio on the San Pedro River was moved to Soamca on the upper Santa Cruz River in 1787, providing increased protection to the region. Over the next 30 years, old silver and gold mines were reopened and new ones were started around Tubac and Tumacácori, as well as along Arivaca and Sonoita creeks. In 1814, Yaqui Indians were brought northward to work gold mines near the Guevavi Mission. Mining continued after Mexico won independence from Spain in 1821, although Apache raiding continued and prevented little further development.

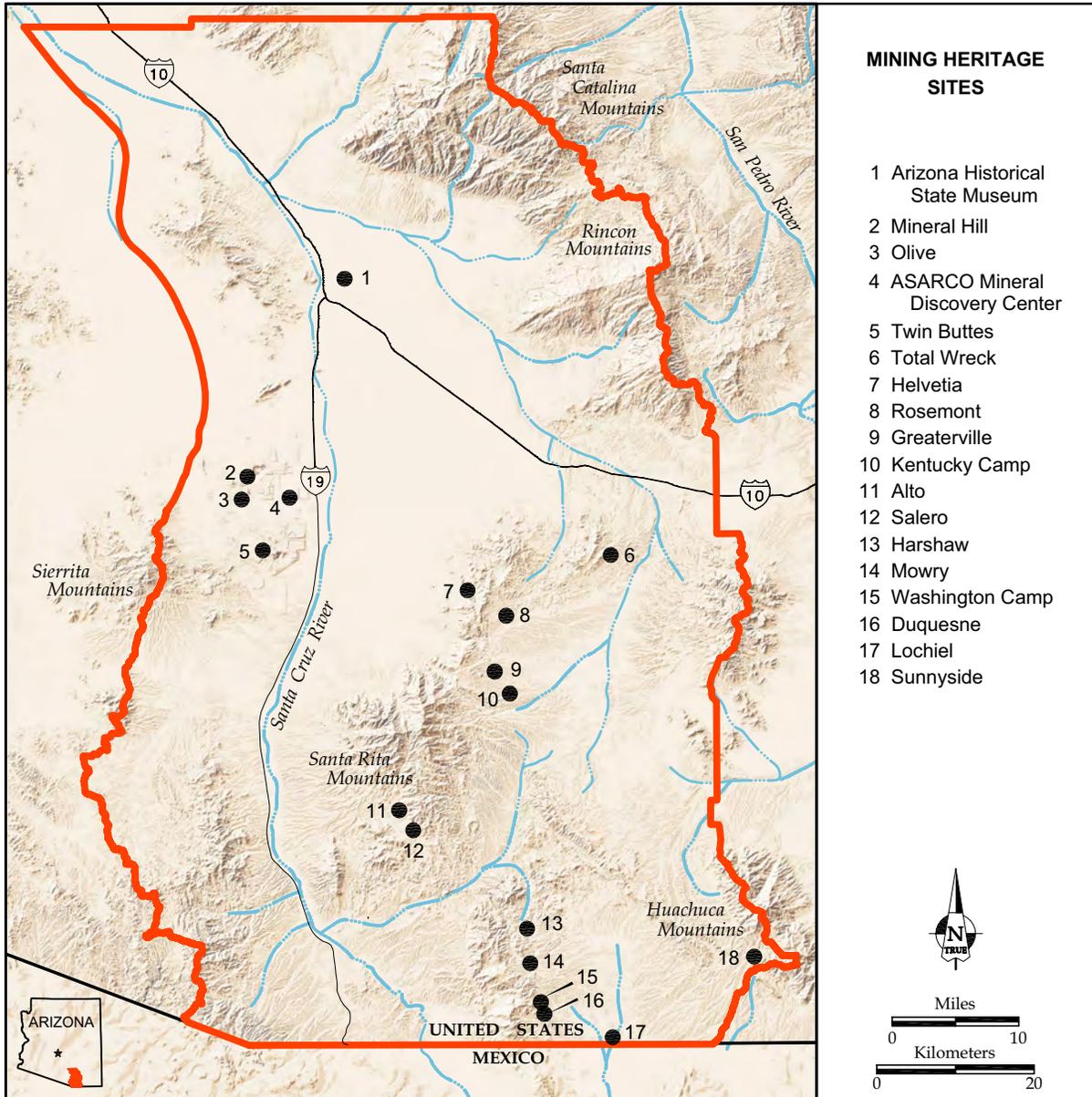
Despite all the mining activities documented in Spanish colonial, missionary, and early Mexican records, the Santa Cruz Valley was never a major mining region before it became part of the United States. The ore deposits were generally shallow, and there were many obstacles to mining in a frontier region vulnerable to Indian attacks and far from sources of mining supplies. While some discovered deposits were very valuable, the total amount of wealth obtained was relatively limited.

American Mining Before the Civil War

Embellished stories of the Spanish mines brought Anglo-Americans into the area following the Gadsden Purchase in 1854, when the region became part of the United States, and after the easily worked placer deposits in California were cleaned out during the California Gold Rush. In 1856, the Sonora Exploration and Mining Company was founded by Charles D. Poston (who would become known as the Father of Arizona) and Samuel P. Heintzelman. They established their headquarters in the abandoned ruins of the Tubac Presidio and reopened about 20 old silver mines in the Santa Rita Mountains along Sópори Wash, and in the Cerro Colorado area west of the Santa Cruz Valley. The following year, the San Xavier Silver Mining Company built adobe furnaces on the Santa Cruz River at Punta de Agua, approximately 3 miles south of the San Xavier Mission. The Salero Mining Company purchased a Spanish silver mine in the Santa Rita Mountains that was originally worked in the early 1700s.

In 1858, the Santa Rita Company split from the Sonora Exploring and Mining Company and took over the mines in the Santa Rita Mountains. It established headquarters at the Hacienda de Santa Rita near the abandoned mission at Tumacácori. The following year, a printing press was brought from Ohio to Tubac, and the first newspaper in Arizona, the *Weekly Arizonan*, began with the support of the two related mining companies. Also in 1859, the firearms inventor and manufacturer Samuel Colt became chief stockholder of the Sonora Exploration and Mining Company and replaced Heintzelman as president. Colt also invested in the Sópори Land and Mining Company and the Arizona Land and Mining Company in the Santa Cruz Valley.

During this same period, soldiers stationed at Fort Buchanan at the head of Sonoita Creek began prospecting in the Santa Rita and Patagonia ranges. Several of the soldiers joined together in 1858 to purchase the Corral Viego Mine from a Mexican prospector, and they sunk shafts and built furnaces at the renamed Patagonia mine. The following year, the Patagonia Mine was purchased by Lieutenant Sylvester Mowry from nearby Fort Crittendon. The renamed Mowry Mine eventually became an enormous success, with a population of several hundred and 12 blast furnaces reducing the rich silver and lead ore into bars.



Mining heritage sites in the proposed National Heritage Area.

United States troops were withdrawn from the region at the start of the Civil War in 1861, and many mines closed due to increased raiding by Apaches who thought they had defeated the troops, and because of rebellions by oppressed Mexican laborers who thought the United States government had collapsed. The Mowry Mine was one of the few mines that continued, and many miners went there seeking protection in numbers. However, when Union troops returned in 1862, Mowry was arrested under the charge of selling lead to make Confederate bullets. The mine was auctioned and then poorly managed by Union agents, and the mine never again reached levels of significant production. New owners brought the Mowry Mine back into production in the 1890s, and the population swelled to 200. This new boom only lasted a short time, and the camp was largely abandoned again by 1913.



Ghost towns are reminders of several gold and silver mining booms and busts in the Santa Cruz Valley since the 1860s.

Mining will be another distinctive theme of this National Heritage Area.

Gold and Silver Mining After the Civil War

More United States troops returned after the Civil War ended, and renewed military protection encouraged American prospectors to begin mining small placer gold deposits (places where native gold had weathered out of bedrock and become concentrated in nearby streambeds) in the Tucson, Sierrita, and Santa Rita mountains. Larger deposits were discovered in those and other mountain ranges through the 1870s. In 1874, a major gold discovery in the eastern Santa Rita Mountains led to the development of Greaterville, with about 500 residents, and nearby Kentucky Camp. However, these towns were abandoned when the gold played out in 1886.

A large vein of silver was discovered in the Santa Rita Mountains in 1877, giving rise to the boomtown of Harshaw. By 1880, the Hermosa Mining Company built a stamp mill and the town had about 2,000 residents, a mile-long main street with seven saloons, and its own newspaper. Damage from storms and a fire and decreasing ore quality forced closure of the Hermosa Mine in 1882, but mining began again on a smaller scale in 1887. In 1903, the new mine owner died, the price of silver dropped, and by 1909, the town was abandoned once again. A final period of occupation lasted from 1937 to 1956, when the Arizona Smelting and Refining Company (ASARCO) worked some nearby mines.

South of Harshaw in the same mountains, Washington Camp was settled by silver miners in the 1870s, but it did not prosper until it was purchased by the Duquesne Mining and Reduction Company in 1889. The company headquarters were established in nearby Duquesne, and a reduction plant was built in Washington Camp. During the 1890s, the towns of Duquesne and Washington Camp were headquarters for the owners of more than 80 mining claims covering 1,600 acres. By 1900, both towns reached their peak populations of around 1,000 each. The post office that served both communities was closed in 1920, but the two old mining camps still have a few residents today.

A little farther south, on the border with Mexico, the few residents of the town of Lochiel are all that is left of a thriving mining and ranching community that developed in the 1880s, and had two smelters and a peak population of 400. The Mexican revolutionary Pancho Villa and his men frequently came across the border in this area to rustle cattle.

Banks were needed to handle the money generated by the the mining rushes, and the first bank in southern Arizona, named the Pima County Bank, opened in Tucson in 1879. Many silver mines and banks in the Santa Cruz Valley and in the rest of southern Arizona closed when the Sherman Silver Act was repealed in 1893, as silver dropped from \$1.25 to \$0.25 an ounce, bringing an end to the post-Civil War mining boom.

Early Copper Mining

Mining in the Santa Cruz Valley and elsewhere in southern Arizona became focused on copper beginning in the late 1880s, and the advent of the electrical age and World War I increased the demand for copper during the next three decades. While some copper mines and associated settlements developed in the Santa Cruz Valley, the most important mines and all the smelters were opened in neighboring valleys between 1885, and the end of World War I. By 1900, copper production in southern Arizona had risen to three times the value of Arizona's combined gold and silver production, and this region led world copper production by 1907.

In the Santa Cruz Valley, Helvetia was one of the richest copper mines during the 1880s and 1890s, operated by the Helvetia Mining Company after 1891. Copper mining began in the Sierrita Mountains in the Twin Buttes region about 1870, and by 1903, the Twin Buttes Mining and Smelting Company was operating several shaft mines, and a major mining camp had sprung to life. Establishment of a post office and completion of the Twin Buttes Railroad branch connected the boomtown of Twin Buttes – with some 300 residents – to the Southern Pacific Tucson-Nogales line at Sahuarita in 1906.

During World War I, demand doubled the price of copper and stimulated another mining boom in southern Arizona. However, the fall in demand after World War I resulted in the closing of many copper mines, leaving another trail of ghost towns in the Santa Cruz Valley and other parts of southern Arizona.

Modern Copper Mining

World War II again increased the demand for copper, although it was not until the development of open-pit mining, in the 1960s, that copper mining resurged in the Santa Cruz Valley and other areas of southern Arizona. The Anaconda Mining Company began a large operation at

Twin Buttes during that decade. By 1976, the four open-pit mines in the Santa Cruz Valley produced 10 percent of the nation's copper and employed 5,000 workers. In the late 1970s, there were still several producing copper mines in the Santa Cruz Valley – all located in the Pima Mining District in the Sierrita Mountains.

During the 1980s, an extended depression in the copper mining industry began as a result of subsidized foreign competition and a deflated value for copper in world markets. By the mid-1980s, most of the copper mines in southern Arizona were idle, or working at greatly reduced capacities. During the same period, just south of international border, copper production was increased at Cananea, and a new major smelter was built at Nacozari. In 1999, the parent company of these facilities, Grupo México, bought ASARCO, which has operated mines and smelters in southern Arizona for more than 100 years. Today, copper mining is again on the rise in the Santa Cruz Valley in response to the climbing value of the metal in world markets.

Distinctiveness of Theme

The National Coal Heritage Area in West Virginia and three National Heritage Areas in Pennsylvania (the Delaware and Lehigh, Lackawanna Valley, and Schuylkill River Valley National Heritage Areas) have coal mining as a central theme. However, no other existing or planned National Heritage Area has precious metal mining as a theme or a working landscape, and this will be one of the distinctive features of the proposed Santa Cruz Valley National Heritage Area. Mining of gold, silver, and copper is an important part of the story of the western United States, with beginnings in the Spanish and Mexican periods.

Mining continues to be an important economic activity, shaping the landscape and lives of residents of the Santa Cruz Valley. Local residents and tourists can learn about the history of mining in this region by visiting well-preserved ghost towns and museums. Designation of a Santa Cruz Valley National Heritage Area will increase awareness about the important role of mining in the history and economy of this region, and it will encourage heritage tourism.

Related Resources

Residents and visitors can learn more about the history of mining in the Santa Cruz Valley at two local museums. The main **Arizona Historical Society Museum** in Tucson has a large permanent exhibit that includes replicas of a mine shaft, typical buildings, rooms, and furnishings in mining camps, as well as displays of mining artifacts. Near Green Valley, the **ASARCO Mineral Discovery Center** has exhibits of local mining artifacts, including a wooden headframe for a mineshaft, pumps, engines, hoists, and rail ore carts.

A number of mining ghost towns can be visited, although some are on private property, so “No Trespassing” signs must be obeyed. The Forest Service acquired **Kentucky Camp** (1874-1904) in 1989, as part of a land swap, and has worked with volunteers to stabilize the five remaining buildings. This historic mining camp is open to the public, and visitors can rent a restored three-room adobe building for an overnight stay (contact the Nogales Ranger District of Coronado National Forest). The 1887 brick home of James Finley in **Harshaw** (1873-present) has been carefully preserved. Some intact adobe buildings are occupied by current residents, and several crumbling adobe structures can be seen from the road. The remains of **Mowry**

(1857-1913), one of the oldest mining camps in Arizona, is on private property, but can be seen from the Forest Road that bisects the townsite. In the small community of **Lochiel** (1884-present), the historic cemetery is on a hilltop overlooking a church and the old United States Customs station; there is also an adobe one-room schoolhouse, built in 1918. All of these buildings are on private property, but can viewed from the road.

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UNITED STATES MILITARY POSTS ON THE MEXICO BORDER (1856 TO PRESENT)

Summary of Theme

The operations and posts of the United States military are an important part of the history of the Santa Cruz Valley. The first United States Army post was established here in 1856, soon after the region was purchased from Mexico. The first duty was to protect mines and ranches from Apache attacks, which escalated just before troops were withdrawn at the beginning of the Civil War to be redeployed in the East. For a few months in 1862, the Confederate flag flew over the region, until Union troops arrived from California and recaptured it following the westernmost skirmishes of the Civil War. In 1865, United States troops were moved closer to the border to defend it against French troops that had invaded Mexico and occupied Sonora. Between 1866 and 1886, several new posts were established, and this region was the frontline of major campaigns to pacify the Apaches.

A new post was established in Nogales in 1910, when the Mexican Revolution threatened to spill across the border. In 1916, this region was a staging area for the Punitive Expedition led by General John J. Pershing; it crossed into Mexico in pursuit of Pancho Villa after he attacked a town in southern New Mexico. Until the beginning of United States involvement in World War I, the military presence was swelled by National Guard units mobilized from western states to protect the border. From 1918 until 1933, the border was guarded by African-American cavalry and infantry regiments known as Buffalo Soldiers.

During World War II, airfields established in the region were important training bases. Due to the dry climate of the area, thousands of decommissioned aircraft have been stored here since the end of World War II. Bomber groups and intercontinental missiles deployed here were critical parts of the national defense during the decades of the Cold War. Today, Davis-Monthan Air Force Base continues to serve important roles for the United States military and the local economy.

Description of Theme

Securing New American Territory

The first expedition of the United States Army into the region was by the Mormon Battalion in 1846, passing through on its way to help seize California during the Mexican War. The Santa Cruz Valley was included in 30,000 mi² of northern Sonora that became part of the United States after the Gadsden Purchase was approved by Congress in 1854. American troops did not immediately take control of the new territory, which is now southern Arizona and southwestern New Mexico. It was two years later, when four companies of the 1st Dragoons cavalry regiment arrived from New Mexico to replace the small Mexican garrison that had remained at the Tucson Presidio to protect the residents.

The commander of the United States force, Major Enoch Steen, did not approve of the housing, water, pasture, or people in Tucson. Disobeying his orders to establish a post there, he led his men 60 miles south and set up Camp Moore near the recently reoccupied ranch at Calabazas. The hacienda there was built in the ruins of a Spanish period mission *visita* at the confluence

of Sonoita Creek and the Santa Cruz River, long abandoned due to Apache raids. Renovated ranch buildings served as quarters for Major Steen and his family.

With the arrival of military protection, the ranch, leased to the post by the ex-Governor of Sonora, quickly swelled with American squatters. Ignacio Pesqueira, the new governor, allowed quartermaster wagons to cross into Sonora for supplies. The following year, Steen received orders from Colonel Benjamin Bonneville, the departmental commander in Santa Fe, to move closer to Tucson. Deriding Tucson as inhabited largely by peddlers of whiskey and flesh, Steen instead moved his camp 25 miles northeast to the headwaters of Sonoita Creek. The new post was named Fort Buchanan in honor of the recently inaugurated President James Buchanan.

In May and June of 1857, a major campaign was conducted against the Apaches under the orders of Colonel Bonneville. A large detachment from Fort Buchanan was led by Captain Richard S. Ewell, as Major Steen was ill with malaria. Joined by troops from forts in New Mexico, the force searched the rugged mountains along the present Arizona-New Mexico line until it found and attacked an Apache camp on the upper Gila River.

Unhappy Outpost

Both health and morale were chronically low at Fort Buchanan, one of the most remote posts in the country. Malarial mosquitos bred in nearby marshy cienegas, making it an unhealthy place to live. In 1858, the post doctor reported that only two occupants of the fort remained free of malaria. Housing for the soldiers was also inadequate, consisting of crude huts constructed of upright logs, with the gaps chinked with mud and roofs of mud. Scattered over a half-mile area, the huts were not protected by a surrounding palisade, and Apaches often prowled through the post at night.

In 1858, two of the four companies of 1st Dragoons at Fort Buchanan left for California, and the following year, another company was relieved by a company of the 8th Infantry. A detachment of the Mounted Rifles also arrived from New Mexico. The new garrison was poorly equipped. For the 93 soldiers, there were only 56 horses, many of them worn-out steeds left over from the Mexican War. Mules were also used during field operations, and proved to be better suited to the long treks and rough terrain. The soldiers were issued variations of eight different types of firearms, but most of the ammunition was of one kind, so many weapons were useless. Despite these obstacles, under the command of Lieutenant Colonel Isaac V. D. Reeve of the 8th Infantry, the troops of Fort Buchanan conducted several campaigns in reprisal of Apache raids in the region, with the largest campaign being conducted in November 1860.

Escalation of Conflicts with Apaches

When a company of the 1st Dragoons returned in 1860, the 8th Infantry left to establish Fort Breckinridge on the nearby San Pedro River. The Dragoons at Fort Buchanan were soon relieved by the 7th Infantry, commanded by Lieutenant Colonel Pitcairn Morrison, for which the post became regimental headquarters. Shortly after this, Fort Buchanan became the focus of a famous incident that escalated hostilities between Apaches and Americans.

In January 1861, a group of Apaches attacked Johnny Ward's ranch on Sonoita Creek, stealing cattle and abducting Ward's stepson, Félix Martínez. Under the impression that Chiricahua

Apaches were responsible, Ward traveled upstream to Fort Buchanan and asked the commander to send troops east to Apache Pass to retrieve the boy and the cattle. Morrison sent a company under the command of Second Lieutenant George Bascom, fresh from West Point. Under a flag of truce, Bascom met with Cochise, leader of a band of Chiricahuas camped nearby. Cochise told Bascom that a band of Coyoteros (White Mountain Apaches) had committed the raid. As insurance for the boy's return, however, Bascom seized and took prisoner Cochise and the six others in his group, which included three relatives. Witnesses report that an infuriated Cochise jumped up, slashed an opening in the tent wall with a knife, and escaped in a hail of gunfire. The six others were still hostages. Cochise stayed near and kept close watch on the military camp, and he was quickly joined by other Chiricahua Apaches and some warriors of the White Mountain band.

Over the next two months, a series of negotiations for hostage exchanges, more betrayals by Bascom, and violent reprisals on both sides resulted in the execution of Cochise's companions, the killing of 150 Americans, the destruction of five Butterfield Stage stations, and ambushes of a wagon train and a stagecoach. In February, more troops from Fort Buchanan and Fort Breckenridge reached Apache Pass and the Indians scattered. The kidnapped boy, Félix, remained with the Indians and later became the noted United States scout Mickey Free, but the Bascom Affair had started a long war between the United States and the Apaches.

At the beginning of the Civil War later in 1861, United States troops in the Santa Cruz Valley and every other post in Arizona were ordered east. Fort Buchanan was burned to prevent it from being used by Confederate soldiers. Camp Lowell, established the previous year in what is now downtown Tucson, was abandoned. Thinking they had defeated the Americans, the Apaches scavenged for usable items at the abandoned forts and increased their raiding in the region. Almost every mine, ranch, and town had to be abandoned. The only holdouts against the Apaches were the town of Tucson; Sylvester Mowry's silver mine, swelled with miners from other claims seeking protection; and Pete Kitchen's ranch on Potrero Creek, just north of the United States-Mexico border. Kitchen described the stops on the dangerous road to Sonora as "Tucson, Tubac, Tumacácori, and to Hell."

The Civil War on the Border

The Confederate Territory of Arizona, including most of what is now southern Arizona and southern New Mexico, was designated in 1861 by Lieutenant Colonel John R. Baylor of the 2nd Texas Mounted Rifles. The Confederate government in Richmond, Virginia, quickly recognized the territory, defined as all of the Territory of New Mexico that lay south of the 34th parallel. General Henry H. Sibley, commander of the Confederate Army of New Mexico, ordered Captain Sherod Hunter from Baylor's regiment to Tucson to establish headquarters there.

Hunter arrived in Tucson with less than 70 men in February 1862, and raised the Confederate flag. Numerous southern sympathizers were among the Anglo residents. Many were from southern states, but there was also widespread anger against the United States for withdrawing all military protection from the Apaches. The few remaining Union sympathizers were rounded up, and those who did not swear an oath of allegiance to the Confederacy were forced to leave town and forfeit their properties. Gaining some recruits in Tucson, Hunter's Arizona Rangers were able to secure 3,000 percussion caps from Sylvester Mowry's mine, and additional supplies were obtained in Sonora.

Hunter traveled north to Ammi M. White's flour mill and surrounding Pima villages on the Gila River, where he captured an advance party of the approaching 1st California Cavalry. To slow the advance of the main force of 2,300 California Volunteers from Fort Yuma, Hunter sent detachments to burn the hay stockpiled at former Butterfield Overland Stage stations between Yuma and Tucson. Perhaps reaching the banks of the Colorado River, this was the farthest western penetration of the Confederate Army, and this action delayed the Union invasion of Arizona by more than a month. A skirmish was fought on 3 March 1862 between Hunter's men and a detachment from Fort Yuma at Stanwix Station, an abandoned Butterfield station on the Gila River. This incident was the westernmost skirmish of the Civil War. Afterward, Hunter sent a detachment of 10 men to Picacho Pass between Tucson and Phoenix to watch for the approaching California Column.

The second skirmish between United States and Confederate troops in what is now Arizona was fought at Picacho Pass on 15 April 1862, between a small number of Union troops and the 10 Confederate pickets. Several of the Confederates were killed or taken prisoner, and three Union soldiers were killed. Swayed by exaggerated reports of the size of the Confederate force in Tucson, the Union force withdrew to the Gila River. Receiving accurate reports of the large size of the approaching Union force, Captain Hunter ordered the evacuation of Tucson on 14 May, leaving only a small detachment behind to notify him of the arrival of Union troops. The Civil War in Arizona was over.

On 20 May 1862, Lieutenant Colonel Joseph R. West led four companies of infantry and cavalry of the California Volunteers into Tucson, and the remaining Confederate detachment fled. General James H. Carleton, overall commander of the California column, soon arrived with more troops. Carleton announced the creation of the Territory of Arizona, named himself Governor, and declared martial law.

Camp Lowell was reoccupied on the future site of the Santa Rita Hotel in downtown Tucson. The house of Confederate sympathizer Palatine Robinson was confiscated and used as headquarters. Under Major David Fergusson, military surveyors mapped the town and its agricultural fields along the Santa Cruz River so they could identify the properties of Confederate sympathizers for confiscation. Two companies of cavalry were sent south to Sylvester Mowry's silver mine, where they arrested Mowry and Palatine Robinson, who was visiting.

The Union soldiers established the Tucson Supply Depot, using confiscated buildings at the Plaza de las Armas, within the crumbling walls of the old presidio, and at the Plaza de la Mesilla to the south. Tucson became the major supply depot for posts between Fort Yuma and New Mexico garrisoned by the California Volunteers. In July and August of 1862, a temporary post was occupied at El Reventon, a ranch on the Santa Cruz River 35 miles south of Tucson. In 1864, El Reventon was reoccupied and one company of the 1st California Cavalry was stationed at the abandoned Calabazas Ranch.

Gold and silver strikes to the north and west during the early 1860s increased Washington's interest, and Arizona was declared a separate United States territory. A north-south line was chosen to separate Arizona and New Mexico because it broke up the pro-southern area that spanned the southern parts of both territories.

When the Civil War ended in 1864, the Tucson Supply Depot was moved north to Fort Whipple, the new military headquarters in Arizona. That same year, units of the 1st California Cavalry

were stationed at Tubac to provide protection from Apache attacks. The following year, the cavalrymen at Tubac were relieved by companies of the 7th California Infantry.

Defending the Border

In 1865, French forces supporting Napoleon III's puppet, the Emperor Maximilian, occupied Sonora as far north as Magdalena. Rumors spread that they might try to reclaim the Gadsden Purchase. General John S. Mason, the new commander of the District of Arizona, was ordered to transfer the Tubac garrison to Calabazas, 8 miles from the border. Leaving only a detachment at Tubac, companies of the 7th California Infantry were repositioned to build and garrison the new post, dubbed Fort Mason, located on the site of old Camp Moore. There, they were reinforced by a battalion of the Native California Cavalry. Ignacio Pesqueria, the new Governor of Sonora, fled the French troops and took refuge at Calabazas with his own troops. With arms and ammunition provided by the American commander, the governor took his troops back across the border, defeated the French troops, and regained control of Sonora.

When an epidemic affected one-third of the United States troops at Fort Mason and its Tubac outpost in the fall and winter of 1865, vacant houses at Tubac were used to quarantine the sick. Early in 1866, the California Volunteers headed west to be mustered out, leaving behind units of the 1st Cavalry and the 14th Infantry. In compliance of 1866 General Orders to rename unfortified forts in Arizona as camps, the commander changed the designation of Fort Mason to Camp McKee. When another epidemic struck in the fall of that year – about the same time the French forces began withdrawing – the post was abandoned and the garrison was moved to Camp Cameron, 15 miles northeast of Tubac, in the foothills of the Santa Rita Mountains.

Scouting, Escort, and Pursuit Duty

In 1866, a company of the 1st Cavalry arrived in Tucson and cleared trees for a new post in a location east of town, but which is now in the heart of the city. The new post was named Fort Lowell in honor of a Union officer killed during a Civil War battle in Virginia. Later that year, the designation changed from fort to camp in compliance with General Orders. Camp Lowell, occupied by companies of the 1st Cavalry and 32nd Infantry, was primarily a tent encampment, with ramadas built over the tents for shade, and a guardhouse, magazine, and ordnance storeroom built of adobe. Officers with families rented quarters in town, and Apache scouts lived in a settlement half a mile to the south. Papago scouts were stationed at Calabazas.

In 1867, a temporary convalescent camp was set up in the Cañada del Oro north of Tucson by troops from Camp Grant who were recovering from malaria. Apache raids were increasing in southern Arizona, and ranchers and residents of smaller towns asked for protection. Between May 1867, and March 1868, troops of the 1st Cavalry re-occupied the post at Tubac, using abandoned buildings, and guarded the Santa Rita mines.

By the time Fort Buchanan was abandoned at the beginning of the Civil War, work had already begun on moving the post about a half mile northeast. When troops of the 1st Cavalry moved from Camp Tubac to the selected location in 1868, they found enough neatly stacked adobe bricks, left in 1861, to construct the necessary buildings. The new post above Sonoita Creek was named Camp Crittenden after a colonel of the 32nd Infantry, then commanding the District of Tucson. The garrison actively scouted and pursued Apaches raiding ranches in the region, seeing much action during 1870 and 1871.

In 1870, Camp Lowell was expanded by claiming 367 acres to the east and south, in the area known today as Armory Park. A new guardhouse, adjutant's office, and an arsenal were constructed of adobe, but the soldiers continued living in tents. Between 1866 and 1873, various companies of 1st, 3rd, 5th, and 8th Cavalry, and of the 14th, 21st, 23rd, 32nd Infantry regiments were rotated through the post.

Incited by a series of editorials in the *Arizona Miner* newspaper, in April 1871, a party of approximately 150 Anglos, Mexican-Americans, and Tohono O'odham from Tucson ambushed a camp of Aravaipa and Pinal Apaches on Aravaipa Creek, where they were under the nominal protection of nearby Camp Grant. Most of the men were away from the camp, so the more than 100 Apaches killed were mostly women. Twenty-seven children were also captured, and the settlement was burned. Dubbed the Camp Grant Massacre by the eastern United States press, the perpetrators were put on trial by order of President Ulysses Grant. A jury of southern Arizona residents, who considered the attack justifiable revenge for every Apache depredation of the previous decades, acquitted all the defendants.

Subjugating the Apaches

The incident near Camp Grant convinced the President and military leaders in Washington that the conflict between Americans and Indians in the Southwest had to be resolved. Under orders to end the last Indian resistance in the region, General George Crook was assigned command of the Department of Arizona in June 1871. In the fall of 1872, he began a campaign to defeat the last groups of Yavapais and Western Apaches who resisted relocation to reservations.

Needing troops for this campaign, Crook ordered the abandonment of Camp Crittenden, but sent a troop of the 5th Cavalry to protect local farmers until after the harvest. This detachment left at the end of the year to participate in the campaign, leaving behind only a small garrison to remove government property. Crittenden was finally abandoned in June 1873. That same year, a military telegraph system connecting San Diego with Yuma, Tucson, and Prescott was completed, and was used during the campaign. Ultimately, Cochise's band of Chiricahua Apaches agreed to settle on a reservation in southeastern Arizona. With the considerable help of Apache scouts from other bands, the Yavapai and Western Apache were defeated, and the few survivors were forced onto reservations. The last holdouts surrendered by 1875.

As the edge of the growing town of Tucson reached Camp Lowell, officers became concerned about increasing illnesses among the troops and misbehavior of soldiers in town. In 1873, the post was moved 7 miles northeast of Tucson to the bank of the Rillito, where there was also better grazing, water, and wood. The new post retained the name of Camp Lowell, and troops of the 5th Cavalry replaced those of the 1st Cavalry and 23rd Infantry. The garrison occasionally responded to Apache attacks on ranches and logging camps, but mostly performed escort duty. The designation was changed to Fort Lowell in 1879, when all camps in Arizona were changed to forts in compliance with a new set of General Orders.

Front of the Last Apache Campaigns

Crook returned to Arizona in September 1882 to track down the last bands of Chiricahua Apaches who refused reservation life. After Mexico signed a treaty allowing United States troops to chase hostile Apaches into northern Mexico, Crook led about 50 soldiers and 200

Quechan, Mohave, and Western Apache scouts into Sonora to chase a Chiricahua band led by the shaman called Geronimo by Mexicans. Chased into the Sierra Madre, Geronimo's band agreed to return to the reservation at San Carlos, arriving in February 1884. However, tired of the hardships and humiliations of reservation life, some of the Chiricahuas deserted the reservation later that year, fleeing to Sonora. Crook led another expedition after them.

An agreement brokered by Crook and Geronimo for the Chiricahuas to return to the reservation following a two-year imprisonment in the East was rejected by President Grover Cleveland and General Philip Sheridan, and some of the Apaches escaped again. A furious Sheridan ordered Crook to stop using Apache scouts and to ship the remaining Chiricahuas by railroad to permanent exile in Florida. Crook asked to be relieved of command, and he was succeeded by General Nelson Miles.

Miles led 5,000 troops – a fifth of the United States Army – after Geronimo's band. He ordered the establishment of a heliograph network that connected United States military posts in the region. Using mirrors, the heliograph directed beams of sunlight up to 40 miles in any direction, and shutters interrupting the beam allowed messages to be sent using the dots and dashes of Morse code.

The impressive United States force, backed by this advanced military communication system, never engaged the renegade Apaches. Geronimo was tracked down by Chiricahua scouts and agreed to surrender for the fourth and last time. After the ceremony was held in Skeleton Canyon in southeastern Arizona on 4 September 1886, Geronimo, his companions, and even the loyal Apache scouts were shipped to exile and imprisonment in Florida, where many died of unfamiliar diseases. The Chiricahua Apaches were not allowed to return to the Southwest until 1913, when the few survivors were given a part of the Mescalero Apache reservation in central New Mexico.

Troops from Fort Lowell participated in the Apache campaigns of the 1880s, and the post served as the major supply depot to posts closer to the field of operations. During this time, the fort quartered companies of the 4th Cavalry and the 8th Infantry. With the final surrender of Geronimo in 1886, troops were gradually withdrawn from southern Arizona. In the late 1880s, Fort Lowell gained a reputation as a prestigious place to be stationed, and it was designated the regimental headquarters of the 6th Cavalry. The fort was abandoned in 1891, when troops were needed for General Miles' campaign against the Sioux in South Dakota.

Protecting the Border during the Mexican Revolution

In the fall of 1910, Mexican supporters of Francisco I. Madero revolted against the 30-year dictatorship of President Porfirio Diaz. Mexico became embroiled in a violent revolution, with opposing political and military forces struggling for control of the country. Wary of the violence spilling across the border, United States troops were stationed at Nogales, Naco, and Douglas in 1910, joining the previously established Fort Huachuca in a line of defense.

After the assassination of President Madero in February 1913, Sonorans refused to accept Victoriano Huerta as his successor. Huerta was the former Diaz general who had betrayed Madero. Sonora and the twin border towns of Nogales became a focus of the revolution. On 13 March 1913, rebels led by the Sonoran strongman, General Álvaro Obregón, attacked Nogales, Sonora, which was guarded by Huerta's troops under Colonel Bernardo Reyes and

rurales (rural police) under Colonel Emilio Kosterlitzky. Sightseers came from all over Arizona to witness the Battle of Nogales, picnicking while they watched. Outmatched, Kosterlitzky and his men fled across the border into Arizona and turned over their arms to the 5th United States Cavalry. Following his success in Nogales, Obregón won another battle a few days later in nearby Cananea.

In April 1914, the coastal city of Vera Cruz was seized by the United States Navy to protect important American-owned oil fields, and President Huerta was forced to resign and flee. Obregón called General Francisco “Pancho” Villa, the cattle rustler turned revolutionary leader of Chihuahua, to a meeting in northern Mexico to determine who would take over as president. Consensus could not be reached. Wary of Villa’s power, Obregón decided to throw his support to Venustiano Carranza, the governor of Coahuila in northeastern Mexico. In another attempt to broker a peaceful solution between the warring factions, General John J. “Blackjack” Pershing, a veteran of Miles’ Apache campaign, hosted a meeting in Nogales, Arizona, on 28 August 1914. On Pershing’s staff was a young officer named Dwight D. Eisenhower. Villa arrived with 50 bodyguards, and Obregón arrived by train along with Sonora’s Governor José María Maytorena and Carranza. This meeting was also inconclusive.

Mexico elected a new Constitutionalist government, with Carranza as president, in 1915. After receiving the support of Obregón, Carranza’s major opponent was Villa. On 26 November 1915, a battle occurred in Nogales, Sonora, between Villa’s famous Division del Norte and the united Constitutionalist force under the command of Obregón. Private Stephen B. Little and two other soldiers of the United States 12th Infantry were killed by Obregón’s soldiers when they mistakenly directed gunfire at American troops guarding the nearby border. American soldiers then opened fire, but there was a ceasefire as soon as the mistake was recognized, and General Obregón and Colonel William H. Sage met at the border and exchanged apologies. Camp Nogales was renamed Camp Little on 14 December 1915.

Losing a series of battles, Villa was pushed northward by Obregón until his back was against the United States border, where the Villistas suffered a decisive defeat at Agua Prieta, the bordertown opposite Douglas, Arizona. Branded an outlaw by the Carranza government, Villa sought refuge in the mountains of Chihuahua. On 9 March 1916, Villa attacked the small border town and United States military camp at Columbus, New Mexico. This was after President Woodrow Wilson recognized the government of Carranza and allowed his troops to cross the border and use the Southern Pacific Railroad as transport to Nogales, Sonora, thereby gaining an advantage. Elements of the 13th Cavalry repulsed the attack, but there were 18 American casualties, including many civilians.

Chasing Pancho Villa

President Wilson ordered General Pershing to organize an expedition to pursue Villa into Mexico. The expedition force of almost 5,000 that entered Mexico in mid-March included the 7th, 10th, 11th, and 13th Cavalry regiments, 6th and 16th Infantry regiments, and part of the 6th Field Artillery. Soon joining were the 5th Cavalry, the 17th, 24th, and 25th Infantry regiments, and engineer units, expanding the size of the expedition force to about 12,000. This campaign represented the last time that United States horse cavalry went into action against an enemy. It was also the first mechanized military expedition, with motorcars used to transport troops. Airplanes were also used as spotters, marking the beginning of the Army Air Corps. A young officer named George S. Patton rode in a truck during the expedition, and foresaw the day when motor vehicles would replace horses on battlefields.

Over its 11-month duration, Pershing's Punitive Expedition never directly engaged Villa. Instead, the American force fought dozens of skirmishes with small bands of Villa's soldiers and also clashed with regular Mexican Army units, sent by President Carranza to prevent Pershing from penetrating too far south. The most serious battle with the Mexican Army in June nearly decimated a detachment of the 10th Cavalry Buffalo Soldiers, an African-American regiment based at Fort Huachuca near the Arizona-Mexico border.

In the summer of 1916, President Wilson ordered the states on and near the border to mobilize the National Guard and send them to the border. Some 160,000 guardsmen were soon bivouacked along the border from California to Texas. Camp Little in Nogales swelled from 900 to 12,000 troops. National Guard units from California and Idaho were stationed in Nogales and patrolled the Arizona-Mexico border. In March, 1917, the newly formed 35th Infantry was transferred from Douglass, Arizona, to Camp Little, relieving the 12th Infantry.

Due to the limited success of the expedition, the high cost of keeping United States troops on the border, and the escalation of World War I in Europe, President Wilson ordered the withdrawal of Pershing's force in January 1917. Pershing later commanded the Allied forces in World War I, and his Lieutenant Eisenhower eventually became commander of the Allies during World War II. General Obregón became president of Mexico twice during the 1920s, and initiated many important and lasting reforms before being assassinated. Pancho Villa retired to a ranch in Chihuahua, but was assassinated in 1923.

Guarding the Border during World War I

The 10th Cavalry Buffalo Soldiers were assigned the mission of guarding the United States-Mexico border during World War I, and companies were stationed at Nogales, Arivaca, and Lochiel. Tensions rose on the border at Nogales in 1918, when rumors spread about German "agents provocateurs" operating in the area, providing military training to Mexican soldiers. On 27 August 1918, a Mexican citizen crossing at the border station from the American side refused to stop for questioning. When a U.S. Customs agent and a soldier of the 35th Infantry chased after him, shots were fired and the situation quickly escalated into a battle between regular troops and civilians on both sides. By the time it was over, three troops of the 10th Cavalry and three companies of the 35th Infantry were involved in what became known as the Battle of Ambos Nogales. Three days after the battle, more than 2,000 troops of the all-black 25th Infantry arrived to provide additional protection.

The Last Army Posts

After World War I, all army posts in Arizona were closed except Fort Apache and Fort Huachuca, while limited border patrol operations continued at Camp Little and Camp Newell. Camp Little, which had become very important to the economy of Nogales, was finally closed in January 1933. One of the last constructions related to the cavalry-era Army in Arizona was the R.O.T.C. stables at the University of Arizona, built in 1935. For the first time since 1856, there were no United States Army posts in the Santa Cruz Valley.

Training Flyers during World War II

During the 1930s, there was little military presence in the region except some training of military pilots at Davis-Monthan Field, the Tucson municipal airport dedicated in 1927, by Charles Lindbergh, after his famous transatlantic flight. In preparation for involvement in

World War II, Davis-Monthan was taken over by the military in 1940, for use as a training base. The field was expanded from 300 to 1,600 acres, and the runways were lengthened to handle the largest bombers.

During World War II, Davis-Monthan was a training base for bombers, including the B-18 Bolo, B-24 Liberator, and B-29 Superfortress. North and west of Tucson, Marana Field and Ryan Field were also established for civilian training of military flyers. From when it opened in August 1942, to its deactivation in September 1945, Marana Field was the largest pilot-training center in the world, training some 10,000 flyers.

At the end of the war, Davis-Monthan Air Force Base was selected as a storage site for decommissioned aircraft due to Tucson's dry climate and ample available space. The national aircraft storage site, nicknamed the Aircraft Boneyard, was initially used to store mothballed B-29s and C-47s, but all surplus military aircraft were eventually stored there.

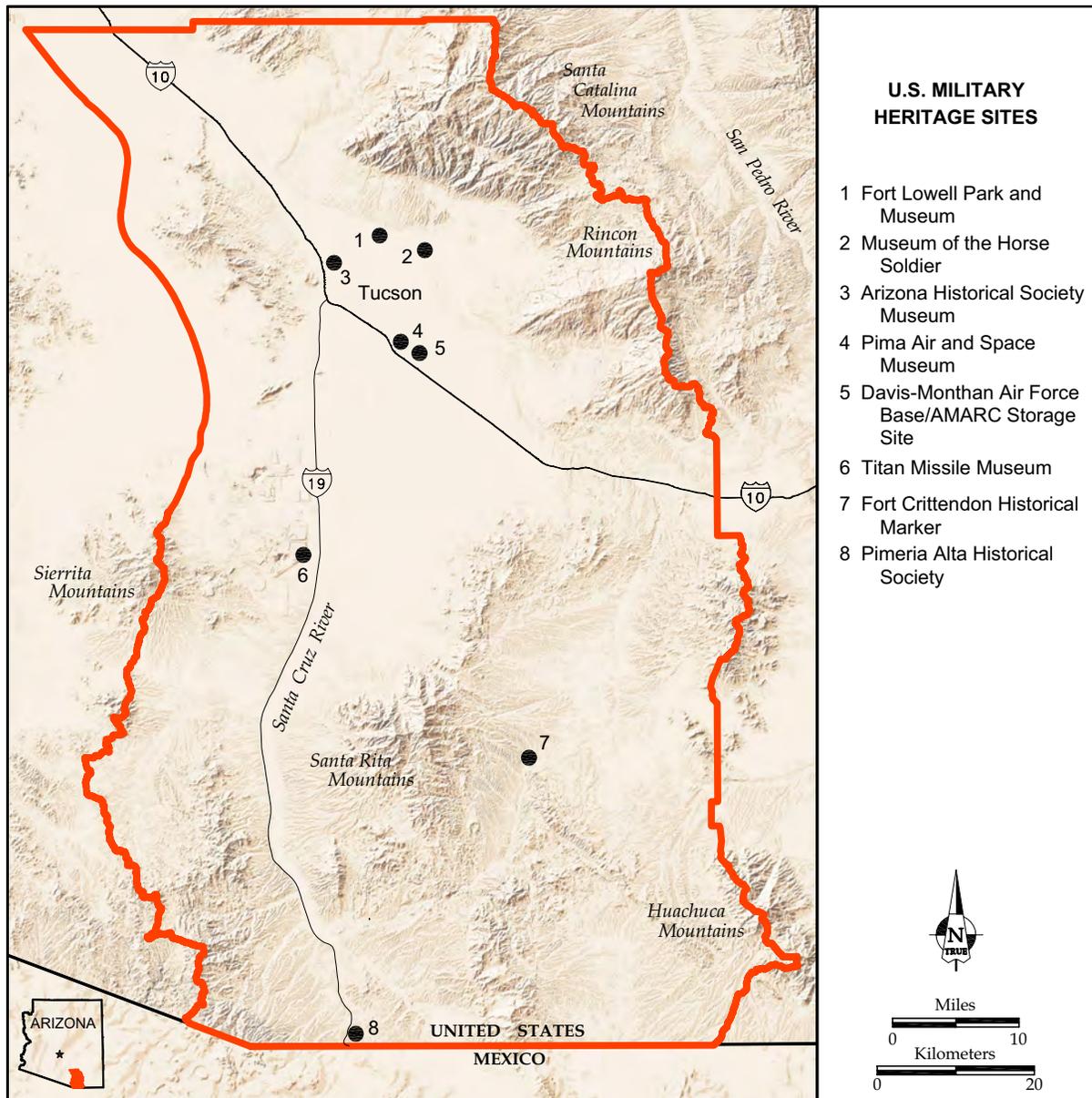
Cold War Bases

During the Cold War, starting in 1946, two B-29 Bomber Groups of the Strategic Air Command were based at Davis-Monthan until 1953, when the Superfortress was replaced by the new jet bomber, the B-47 Stratojet. That same year, a squadron of F-86A Sabre Jet fighters of the Air Defense Command were first based at the airfield. In the early 1960s, a wing of U-2 reconnaissance aircraft was transferred to Davis-Monthan, combat crew training for the F-4 Phantom was initiated, and 18 Titan II missile sites were built within 25 miles of Tucson and manned by the 390th Strategic Missile Wing.

In 1971, the 355th Tactical Fighter Wing was re-activated at Davis-Monthan Air Force Base, flying the A-7 Corsair II, and the F-4s moved to Luke Air Force Base near Phoenix. The U-2 Wing was transferred to Beale Air Force Base, California, in 1976. That same year, command of the base was transferred from Strategic Air Command to the Tactical Air Command, and the primary mission changed from bombers to attack fighters. With replacement of the A-7 by the A-10 Thunderbolt II in 1979, Davis-Monthan became the primary training location for flying and tactical maneuvers, including use of the Goldwater Bombing and Gunnery Range, just to the west.

During the 1980s, the 836th Air Division was activated at Davis-Monthan to oversee multiple units. The 868th Tactical Missile Training Group was activated to train personnel in the Ground Launched Cruise Missile and deployed units to Europe that were so important in the United States position which secured the end of the Cold War. Also arriving during that decade were the 41st Electronic Combat Squadron and the 42nd Airborne Command and Control Squadron, both flying versions of the Lockheed C-130 aircraft, and the 602nd Tactical Air Control Wing was activated with subordinate units covering the western states. In 1992, the 836th Air Division was inactivated, and the 355th Fighter Wing was redesignated the 355th Wing.

Today, Davis-Monthan is one of the most important bases in the U.S. Air Force, with its variety of important missions, training facilities, proximity to the Goldwater Range, extensive size, aircraft storage facilities, good weather, and location away from heavy air traffic areas. It is a major unit of Air Combat Command, and is joined by Air Force Material Command, Air Force Special Operations Command, and Air Reserve Command. Headquarters 12th Air Force is the air component of United States Southern Command, with responsibility for the Caribbean



United States military heritage sites in the proposed National Heritage Area.

and Central and South America, where it exercises supervision of all U.S. Air Force assets in the counternarcotics mission in USSOUTHCOM area. Its supervision extends to all reserve wings in the western United States and eight active combat wings in the west. The Aerospace Maintenance and Regeneration Center provides temporary and permanent storage for all government aircraft, usually about 5,000 aircraft of all types. Flying HH-60 Pavehawk helicopters, the Reserve 305th Rescue Squadron, and the Special Operations Command 563rd Rescue Group are available to perform rescue missions worldwide.

Adjacent to Davis-Monthan is the headquarters of the U.S. Customs Service in this large area of the border. A significant portion of the aircraft ramp is set aside for use of a small unit from the 162nd Fighter Wing, the largest Air National Guard unit in the United States. Here, air

force units from all over the world can establish themselves for short periods of time and take advantage of the excellent flying weather in Tucson. Because most of the Air National Guard units are from colder northern states, it is known as the Snow Bird Ramp. The full 162nd Wing is stationed at Tucson International Airport, where pilots from all over the world are instructed in flying the F-16 aircraft.

United States Military Posts in the Santa Cruz Valley (in chronological order)

- ◆ Camp Moore, 1856
- ◆ Fort Buchanan, 1856-1861
- ◆ Post at Tucson, 1862-1864
- ◆ Tucson Supply Depot, 1862-1864
- ◆ El Reventon, 1862 and 1864
- ◆ Camp Tubac, 1864-1868
- ◆ Camp Lowell, 1866-1873
- ◆ Fort Lowell, 1873-1891
- ◆ Camp Crittenden, 1868-1873
- ◆ Fort Mason/Camp McKee, 1865-1866
- ◆ Camp Cameron, 1866-1867
- ◆ Camp Nogales/Camp Little, 1910-1933
- ◆ Davis-Monthan Air Force Base, 1940-present
- ◆ Titan II Missile Silos, 1963-1984
- ◆ Air National Guard base at Tucson International Airport, 1975-present

Distinctiveness of Theme

The Revolutionary War is the central theme of the proposed Crossroads of the American Revolution National Heritage Area, and Civil War battles are central themes of the Shenandoah Battlefields and Tennessee Civil War National Heritage Areas. However, the changing role of the United States military on the Mexican border is a unique theme among National Heritage Areas. The development of this theme in the proposed Santa Cruz Valley National Heritage Area will increase public recognition of the history of the United States military in southern Arizona, which represents an important part of the national story.

Related Resources

Many places can be visited to learn about the military history of the Santa Cruz Valley. Nineteenth century forts, military life, and Apache campaigns are interpreted at the Arizona Historical Society Museum on Second Street, the Fort Lowell Museum, and the Museum of the Horse Soldier in Tucson, and the Pimería Alta Historical Society in Nogales. A roadside sign on Highway 83 between Sonoita and Patagonia marks and interprets the site of Fort Crittenden. The third largest aircraft museum in the United States, the Challenger Space Learning Center, and the Arizona Aviation Hall of Fame are at the Pima Air and Space Museum. There can be seen exhibits about the most famous aircraft, from the Wright Flyer to the latest combat planes. Escorted tours of the AMARC Storage site (Aircraft Boneyard) are also available from there. The Titan Missile Museum in Sahuarita is the only one in the world, and it is an

accurate copy of an active site. This National Historic Landmark highlights the role of Intercontinental Ballistic Missiles in national defense during the Cold War. Aerospace and Arizona Days is the annual base visitation displaying many historic and modern aircraft, civilian acrobatics flying, military precision demonstration teams, and parachute jumping.

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UNITED STATES-MEXICO BORDER CULTURE (1854-PRESENT)

Summary of Theme

The Santa Cruz Valley spans the United States-Mexico border, a line marked by fences, patrols, and inspection stations. Despite these barriers, however, residents of the valley find their lives are entwined with people on both sides of the boundary, whether through family ties, economic interaction, or common history. The region within the proposed Santa Cruz Valley National Heritage Area had long been viewed by the Spanish, Mexican, and United States governments as a frontier, a landscape considered open, sparsely populated, and full of potential. Each wave of settlement initiated interaction with Native Americans and previous immigrants. The Gadsden Treaty, ratified in 1854, transferred political control of the area from Mexico to the United States. Former Mexican nationals abruptly found themselves, their land, and their property incorporated into a different nation, one which spoke another language and practiced different cultural traditions. This exchange did not result in the decline of Mexican customs, but rather, the emergence of a vibrant culture associated with the border and the region, shared by residents with diverse backgrounds. The proposed Santa Cruz Valley National Heritage Area will celebrate this distinctive lifeway that has been shaped by the physical and political geography of the region.

Description of Theme

The creation of a boundary between Mexico and the United States in this area prompted new behaviors distinctive to the border. Shortly after Mexico and the United States declared an end to their hostilities, the border itself encouraged cooperation between the two nations. For example, the Apache strategy of raiding settlements and then quickly crossing the border motivated the recently adversarial nations to sign an agreement, in effect from 1882 to 1886, allowing pursuit of Apaches across the international boundary by either side. Commerce also linked the former antagonists in numerous ways. Nogales, Arizona, abuts Nogales, Sonora, on the border, and the two towns were founded together in 1882. Railroads from Guaymas in Mexico and Kansas City in the United States met in ambos (meaning both) Nogales. The cities grew together, sharing resources such as water, shops, and firefighters, and neither would have existed without the presence of the border. This cooperation extended up the Santa Cruz Valley, enabling the florescence of a border culture that embraced aspects of both Mexico and the United States.

Economic Interaction

Because the international boundary crosses an area that is geologically and ecologically unified by the Santa Cruz River, the Sonoran Desert, and mountain ranges, economic enterprises are also similar. Mining activity occurred on both sides on the border, with smelters processing ore from mines in both Mexico and the United States. Americans and Mexicans crossed the border to work in mines on the other side. Cattle ranching had long been practiced in the region, and Mexican vaqueros, or cowboys, remained a crucial part of ranch life in the Santa Cruz Valley of Arizona. Cattle drives routinely began in Sonora and ended in the United States. Americans bought ranches south of the border, and former Mexican nationals continued to ranch lands that had belonged to their families for generations. As cotton farming began to

flourish in the valley, Tohono O'odham workers on Anglo farms were joined by immigrants from Arkansas, Oklahoma, and Texas, and finally, by Mexicans recruited to work in the fields. These working-class, largely rural occupations are reflected in the art forms, expressive styles, food, and music of Santa Cruz Valley border culture.

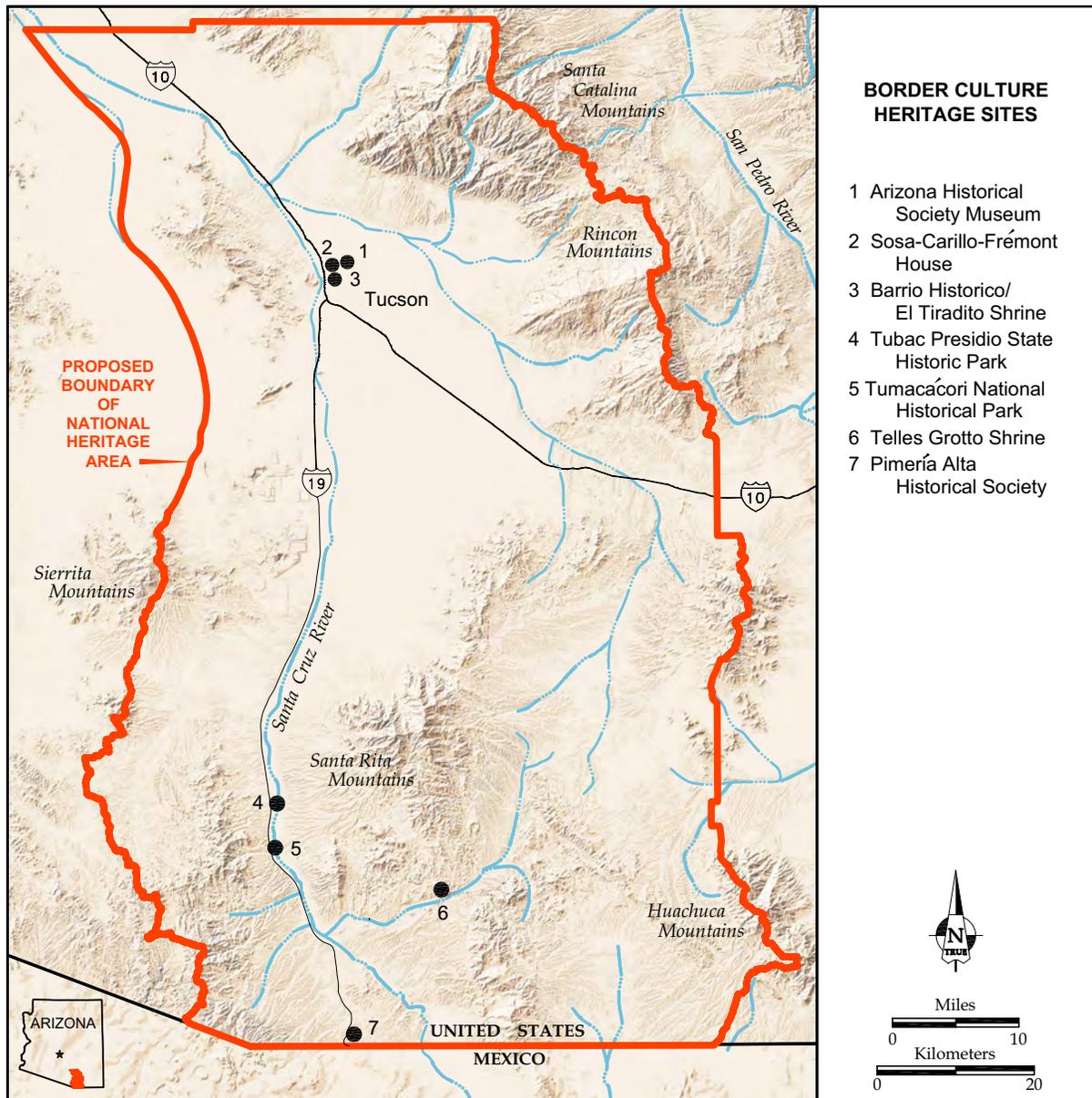
Beginning in the 1920s, Nogales became a major commercial port of entry for produce. Railcars and refrigerated trucks continue to supply the United States with fruits and vegetables in the winter months, when ambos Nogales are most lively. Products from the United States also make their way across the border. Morley Avenue in Nogales, Arizona, caters to Mexican shoppers, who comprise 80 percent of the clientele. The street features fashionable clothing and dry goods stores, which advertise in Hermosillo, 160 miles south, and Tucson. When Russian Jews and Lebanese merchants opened shops in Nogales, they learned to communicate with both Mexicans and Anglo-Americans. This commerce requires brokers who are proficient in both Spanish and English, and who are familiar with the cultural patterns of two nations. Consequently, economic interests in the region have encouraged residents of the Santa Cruz Valley to maintain language skills and social ties that span the international boundary.

Social Interaction

While economic interaction between people in the United States and Mexico are obvious along the border, these behaviors extend far up the Santa Cruz Valley. Unlike much of Arizona, the Santa Cruz Valley supported a nearly continuous occupation of Spanish-Mexican settlements and Native American communities. When the Gadsden Purchase was finalized, arriving Anglo-American settlers encountered residents of Tucson who could trace their connection back in the area for generations. As a result, the Santa Cruz Valley retained Hispanic and Native American traditions while other towns in Arizona took on a noticeably Anglo-American flavor. People in Phoenix and other parts of rapidly developing Arizona condescendingly referred to Tucson as a Mexican town, recognizing the distinctive cultural character of the community.

When new settlers arrived in Tucson, they found an established elite. Prominent Mexican families continued to be leaders in business and politics long after the arrival of Anglos. Tucson was the territorial capital between 1868 and 1878, and during this period, Pima County frequently elected men of Mexican descent to both houses of government, as well as their Anglo in-laws. Indeed, Anglo men who became leaders in the community had often married into important Mexican families, whose connections were crucial for newcomers. In the 1870s, almost 23 percent of marriages in Pima County were between Anglo men and Mexican women, although these numbers decreased dramatically in the next 40 years.

The children of these unions contributed to a bicultural and bilingual society in the region. Despite the fact that Anglos had much more power in the rapidly changing Santa Cruz Valley, many of the offspring of intermarriages, like Carlos Tully and Bernabé Brichta, chose to identify more strongly with the Mexican community. Their Anglo fathers had often been absorbed into Mexican society, rather than into Americanizing families of Mexican descent. Today, influential families of Mexican descent carry non-Hispanic surnames and emphasize their Mexican heritage. Unlike other areas in which intermarriage has been an agent of the eradication of previous cultural forms, in the Santa Cruz Valley, intermarriage played a role in the production of a culture that values bilingualism and biculturalism.



Border culture heritage sites in the proposed National Heritage Area.

Length of Residence

A related aspect of contemporary border culture in the Santa Cruz Valley can be heard in the repeated references of residents to the length of time their families have been in the area. Because the region continues to receive immigrants from other parts of the United States and from Mexico, long-term residents have turned to their heritage as a source of legitimacy. Heritage societies, such as *Los Descendientes del Presidio de Tucson* and *Los Tubacqueños*, have formed to celebrate their long ties to the area. Those residents not of Mexican descent also follow this pattern, as the Tucson Chinese Historical Society and the Jewish Historical Society of Southern Arizona demonstrate. Politicians routinely make references to the number of

generations they have lived in the area. In Nogales, it is not uncommon to hear someone say, “I’m a newcomer – I’ve only lived here for 40 years.” The Santa Cruz Valley, compared with the rest of Arizona and much of the United States, tends to celebrate connections to the landscape that span many generations.

A steady flow of immigrants encourages this trend, as a means of distinguishing recent arrivals from Mexico and families who have been in the region for generations. However, these same immigrants also help to maintain Mexican traditions, social ties that cross the border, and the regular use of Spanish. Family networks connect northern Mexico and communities in the Santa Cruz Valley, providing newcomers with the support they need to prosper in an unfamiliar nation.

Neighborhoods and Border Culture

These networks promoted the creation of distinctive neighborhoods and architectural styles. Much of this discussion will focus on Tucson because, historically, it has been the most densely populated portion of the Santa Cruz Valley. Indeed, prior to 1886, settlement away from presidios was severely constrained due to the threat of Apache attack. Even after this period, many of the Tucson neighborhoods and homes also housed the families of valley ranchers, who kept residences in town to facilitate access to school, church, and shopping.

The early Anglo-American settlers in the Santa Cruz Valley utilized Sonoran materials and architectural designs. Adobe and wood structures were economical and suitable for the climate. As the railroads allowed the acquisition of industrial materials, new homes included bricks, glass windows, and milled lumber but kept a Sonoran form. Other American changes soon followed. For example, houses began to feature a sleeping porch at the back, to access the cool night air in the extreme summer heat, rather than using a courtyard or the roof. Architecture reflected a combination of Spanish-Mexican and American traits, as did much of the population.

At the turn of the twentieth century, however, adobe houses were only seen in low-income, largely Mexican-origin enclaves, as Anglo turned to brick for their homes. Nonetheless, several of these early homes exist today, included in the many National Register Historic Districts in Tucson and Nogales. They stand as reminders of a persistent, vibrant border culture.

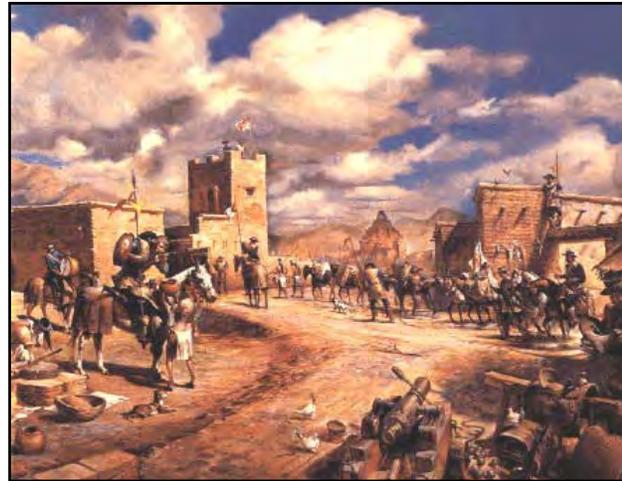
Tucson’s south side continues to embrace new arrivals from Mexico. This neighborhood features *carnicerías* (butcher shops), *tortillerías*, *panaderías* (bakeries), and Sonoran-style restaurants. Colorful murals on buildings or fences portray symbols originating on both sides of the United States-Mexico border. Homes display religious shrines in their front yards. This neighborhood remains a place where border culture is expressed in a wide variety of forms.

Expressive Forms of Border Culture

The food, music, dance, and art of the Santa Cruz Valley have all been influenced by the border and the distinctive landscape and cultural mixing found in the region. For example, flour tortillas and beef dishes are particularly common in this area due to the prevalence of cattle ranching and the introduction of wheat by the Spanish. Unlike other parts of the Spanish frontier, wheat could be grown successfully in the Santa Cruz Valley, and a preference for



This will be the first National Heritage Area to celebrate cross-border connections between the United States and Mexico.



Native American, Spanish, and Mexican heritages that span the border will be distinguishing themes of the National Heritage Area.



wheat flour over corn tortillas developed. A local specialty, carne seca (literally dried beef), is also suited to the desert climate.

Norteño music, popular all along the border, is a product of Mexican inspiration on both sides of the border. Originally developed in northern Mexico – as the name implies – the style became influenced by conjunto music, a form dominant north of the border until the 1960s. Mexican immigration to the Santa Cruz Valley brought a taste for the norteño tradition, but the border transformed the music.

Another musical tradition brought by recent migrants is the mariachi band. Although the first mariachi group in Tucson was established after World War II, the city today hosts a large

annual festival celebrating the music. Another mariachi festival is held farther south in the Santa Cruz Valley, at Patagonia Lake State Park. Similarly, folklórico dancers perform in costume in the style of several Mexican states, celebrating the traditions of immigrants at festivals throughout the year.

Some of these festivals commemorate Mexican patriotic holidays, such as Cinco de Mayo and Días de Septiembre (September 16, Mexican Independence Day). Others are held in observance of Catholic religious holidays, such as el Día de San Juan, which is widely celebrated in the Santa Cruz Valley. Because this is the day of John the Baptist, water is a significant part of the celebration, and the day has special meaning in such a dry land. Día de los Muertos, or the Day of the Dead, is observed with vigor, as is Halloween. In fact, many festivals marking Mexican holidays simultaneously demonstrate strong allegiance to the United States, using flags, military processions, and American patriotic music. These events are not simply copies of Mexican events; they take on a unique character that comes from the United States-Mexico border and the Santa Cruz Valley.

Other notable art forms in the Santa Cruz Valley include piñatas, hollow papier-mâché figures filled with candy and featured at children's parties, and cascarones, decorated eggshells filled with confetti. Artificial flowers, usually made from paper, adorn high school parade floats, homes, and gravesites on the Day of the Dead. Murals frequently combine secular and religious symbols of the border region, portraying Yaqui deer dancers, the Virgin of Guadalupe, and prickly pear cactus.

The history and geography of the region have produced a vibrant culture that celebrates a deep, long-term connection to the land. Far from being a remnant of the past, United States-Mexico border culture continues to grow and transform with the economic and social interactions of different ethnic groups drawn to this area. Border culture has been embraced by residents without Hispanic roots, and Anglos in the region regularly use Spanish words, value local cuisine, and attend fiestas, claiming border culture as their own. Rather than contributing to the dilution of this distinctive cultural form, newcomers tend to enhance the richness of border culture. The proposed Santa Cruz Valley National Heritage Area will celebrate this theme, strengthening already existing cross-border connections.

Distinctiveness of Theme

Cane River National Heritage Area in Louisiana highlights the multicultural legacy of that region. However, no other National Heritage Area is on an international boundary, nor do any make border culture a theme. United States-Mexico border culture is unique as a theme among National Heritage Areas. The impact of cross-border interaction has been powerful along the entire border region, but the distinctive history of the Santa Cruz Valley has led to an especially vibrant legacy, which is active today.

Many opportunities for experiencing border culture exist in the area now, through festivals, restaurants, neighborhood tours, and museums. Heritage tourism will increase, however, as designation of a Santa Cruz Valley National Heritage Area boosts awareness and education about cultural events, art forms, and the distinctive character of this region.

Related Resources

The Santa Cruz Valley hosts numerous annual events related to the border culture theme. A partial list includes Cinco de Mayo celebrations in Nogales and Tucson, the Día de los Muertos Parade, La Fiesta de San Agustín, and the Día de San Juan Festival in Tucson, and the Fiesta Navidad in Tubac. The Folklorico Festival Extravaganza and the International Mariachi Conference and Fiesta de Garibaldi, both in Tucson, draw participants and audiences from across the United States and Mexico. The City of South Tucson holds the Norteño Music Festival, which also brings artists from around the border region.

A number of shrines built by residents of Mexican descent dot neighborhoods in Tucson – the best known being El Tiradito (The Wishing Shrine) in the Barrio Historico, which itself includes the National Register Historic Districts of Barrio El Hoyo and Barrio Libre. Barrio Historico contains examples of Sonoran architecture, discussed above. Another well-known shrine, the Telles Grotto Shrine, lies outside Patagonia.

Several museums and historical societies celebrate regional border culture. The Pimeria Alta Historical Society in Nogales houses a small museum and library. The Sosa-Carillo-Frémont House (circa 1858), on the National Register of Historic Places, is a branch museum of the Arizona Historical Society. It features period furniture and stands as an example of a Sonoran row house. Tubac Presidio State Historic Park and Tumacácori National Historical Park both include border culture in their exhibits.

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Chapter 5

POTENTIALS FOR DEVELOPING HERITAGE AND NATURE TOURISM

One of the biggest economic benefits of Congressional designation for a Santa Cruz Valley National Heritage Area will be a boost to heritage and nature tourism in southern Arizona. Currently, visitors from many other states and countries travel to this region to experience its unique nature and/or heritage resources. The increased national and international recognition brought by a National Heritage Area designation will allow the region to build on the strong existing tourism industry. Related resources across the region can be linked by the interpretive themes of the National Heritage Area, regional tourism itineraries can be developed for each theme, and tourism promotion can be coordinated at a regional scale.

NATURE AND HERITAGE ATTRACTIONS

Heritage and nature tourism are currently the cornerstones of the regional tourism industry. A 1997 study by the University of Arizona found that the top tourist attractions in the Tucson region are nature and heritage destinations, which are also visited repeatedly by large numbers of local residents. Saguaro National Park receives almost 3.5 million visitors annually, second in Arizona only to Grand Canyon National Park. Sabino Canyon, the rest of the Santa Catalina Mountains, and Tucson Mountain Park are each visited more than 1 million times a year. The Rillito River Park and the Arizona-Sonora Desert Museum each have more than 500,000 annual visitors. The Arizona Office of Tourism reports that the number of visits to the three state

Top Nature Attractions in the Proposed National Heritage Area	Visitation 2002
Saguaro National Park (East and West)	3,400,000
Sabino Canyon, Coronado National Forest	+1,500,000
Santa Catalina Mountains (except Sabino Canyon), Coronado National Forest	+1,500,000
Tucson Mountain Park	+1,500,000
Rillito River Park (2003)	587,000
Arizona-Sonora Desert Museum	520,000
Reid Park Zoo	413,000
Madera Canyon, Coronado National Forest (2000)	260,000
Mount Lemmon Ski Valley, Coronado National Forest	221,000
Patagonia Lake State Park	217,000
Tohono Chul Park	169,000
Colossal Cave Mountain Park	165,000
Roy P. Drachman Agua Caliente Park (2003)	135,000
Santa Cruz River Park (2003)	133,000
Catalina State Park	126,000
International Wildlife Museum (2001)	110,000
Tucson Botanical Gardens	98,000
The Nature Conservancy's Patagonia-Sonoita Creek Preserve (average 1998-2000)	17,000
Las Cienegas National Conservation Area (2003)	13,000

parks in the region that are currently open to visitors (Catalina, Patagonia Lake, and Tubac Presidio) totals more than 360,000 annually.

Birding is currently the major nature tourism activity in southern Arizona, although the diverse landscape of this region—including lush desert vegetation, cool canyons, and forested sky islands—offers many other nature experiences. The Santa Cruz Valley is also a cultivated landscape, and another growing tourist industry in the region is agricultural tourism. The Sonoran Desert Conservation Plan estimates that pick-your-own orchards and farms attract as many as 10,000-30,000 visitors per farm during the harvest seasons. Also increasing in popularity are farmers' markets, and tours and festivals at wineries in the Sonoita and Elgin areas.

For heritage tourists, the region has many interesting archaeological sites and historic buildings, neighborhoods, and communities, ranging from ruins to ghost towns to stunning restorations. The church at San Xavier is widely considered to be the most outstanding example of Spanish period architecture in the United States, and the mission at Tumacácori National Historical Park, established by Father Kino in 1691, is the oldest in Arizona (although the standing church dates to the early nineteenth century). The park at Tumacácori has recently expanded significantly to 355 acres, and the nearby Tubac Presidio State Historic Park is now complemented by the interpretive trail through the Barrio de Tubac Archaeological Preserve maintained by the Archaeological Conservancy. The Juan Bautista de Anza National Historic Trail along the length of the Santa Cruz River is being marked and developed segment by



*The growth of heritage tourism
and nature tourism brings
long-term economic benefits
to designated areas.*



Top Heritage Attractions in the Proposed National Heritage Area	Visitation 2002
Old Tucson Studios	350,000
Pima Air and Space Museum	200,000
Tucson Museum of Art and Historic Block	191,000
San Xavier Mission	175,000
Arizona Historical Society, Second Street Museum	85,000
Titan Missile Museum	57,000
Tumacácori National Historical Park	48,000
Arizona State Museum	40,000
Old Pueblo Trolley (2003)	26,000
Tubac Presidio State Historic Park	19,000
La Posta Quemada Ranch Museum	10,000
Fort Lowell Museum	6,000
Sosa-Carillo-Frémont House (2003)	6,000
Arizona Historical Society, Downtown Museum	6,000
Postal History Museum	3,000
Pimería Alta Historical Society	3,000

segment, as funding is obtained. The Anza Trail and the chain of Spanish-period missions and presidios down the Santa Cruz Valley form a unifying heritage theme, one which will link the rebuilt mission and presidio in the Tucson Origins Heritage Park (a key part of the Rio Nuevo project) to its larger historical context.

The region has a number of accessible Old West ghost towns and mining camps, ruins of military forts built before and after the Civil War, and well-preserved Territorial period ranch houses. Important examples of historic ranch buildings are being restored at the new San Rafael State Park, Empire Ranch, Canoa Ranch, and Posta Quemada Ranch. Tourists and residents interested in the prehistoric cultures of this area – the earliest dating back to at least 12,000 years ago – can already see the remains of a Hohokam village and ballcourt at Romero Ruin in Catalina State Park. Soon they will also be able to visit the new Julian Wash archaeological park, interpreting a Hohokam village near the Interstate 10/Interstate 19 interchange, and learn about Tucson’s 4,000-year history of continuous settlement and agriculture, at the Tucson Origins Heritage Park.

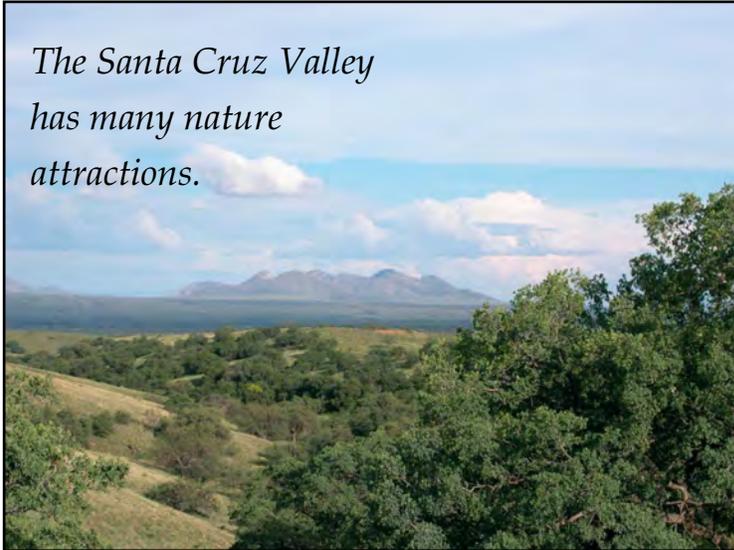
Heritage tourism also takes many other forms in the region. A growing number of ranches offer ranch-living and round-up tour packages, attracting many tourists seeking an authentic experience of working and living on a real Western ranch. Many bed-and-breakfasts are located in historic buildings, adding to their appeal as alternative lodging. Guided photographic tours of ghost towns and prehistoric rock art sites are also available. The new National Heritage Area could maximize potentials for heritage tourism in the region by identifying sets of destinations, festivals and other events, foods, musics, crafts, and lodging related to each other in terms of heritage themes.

CURRENT ECONOMIC IMPACTS

Tourism is a major industry in the proposed National Heritage Area. The Metropolitan Tucson Convention and Visitors Bureau estimates that tourism currently impacts the economy of

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*The Santa Cruz Valley
has many nature
attractions.*



*Increased nature tourism
such as birdwatching
will bring economic
benefits to the region.*

Tucson and eastern Pima County by \$1.8 billion a year, and supports 40,000 jobs. Local governments also greatly benefit from taxes generated by tourism. A 1997 study by the University of Arizona showed that, from tourism-related taxes, Pima County collected \$9.9 million and the City of Tucson collected \$12.3 million during the 1995-1996 fiscal year.

In terms of expenditures and total economic impacts, heritage and nature tourists are some of the most desirable kinds of tourists. According to the Report on Cultural and Historic Tourism by the Travel Industry Association of America in 2001, visitors to historic sites stay longer and spend more money than other kinds of tourists. A 2002 study by the University of Arizona concluded the same things about nature tourists in southeastern Arizona, and estimated that the total economic impacts (direct, indirect, and induced) of visitors to the top two birdwatching sites in the upper San Pedro Valley ranged between \$17 and \$28 million in 2001. Because 20 of the top 50 birding spots on the Southeastern Arizona Birding Trail are within the boundaries of the proposed National Heritage Area, the total economic impacts of birding in this region are likely at least comparable to those in the neighboring San Pedro Valley. The Arizona Office of Tourism ranks nature tourism as the fastest growing type of tourism in the state.

POTENTIALS FOR GROWTH

Regional growth in heritage and nature tourism resulting from designation of a National Heritage Area can be enormous. For example, the Path of Progress National Heritage Area in

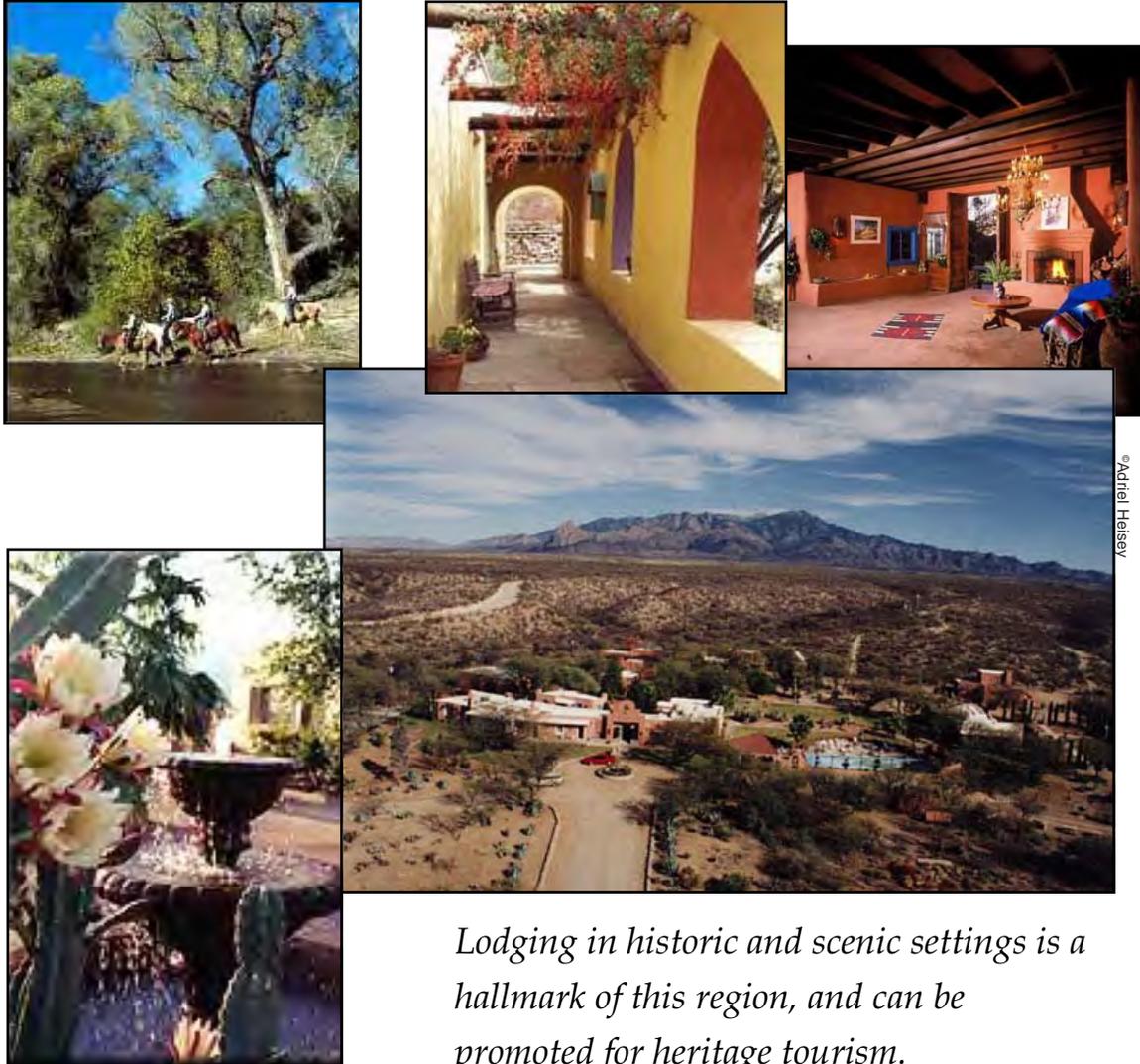


Traditional foods, music styles, crafts, and cultural festivals that also make this region unique will be promoted.



southwestern Pennsylvania experienced a doubling of the annual economic impact of tourism in the 10 years following designation, and both the average length of visits and the average amount spent by each tourist more than doubled. A recent comparative study of seven National Heritage areas by Michigan State University found that such increases are typical. If the Santa Cruz Valley similarly doubled the current annual economic impact of tourism, the resulting \$3.6 billion in annual impact and additional 40,000 jobs would provide a big boost to the economy of the region.

The seed money available to Heritage Areas has proven to be an important catalyst for local economic growth. The Alliance of National Heritage Areas reports that, for every \$1 of federal



Lodging in historic and scenic settings is a hallmark of this region, and can be promoted for heritage tourism.

match funding, the studied National Heritage Areas have leveraged an average of \$8.70 in local funding, from a combination of governments, business groups, corporations, foundations, and individuals. For those Heritage Areas that obtain the full \$10 million federal match over 15 years, an average of \$100 million will be provided to their local economies, largely in the form of projects that result in increased tourism and the related economic benefits.

Based on performances of other National Heritage Areas, designation of a Santa Cruz Valley National Heritage Area can be expected to strengthen the regional economy through increased tourism, job creation, and stimulation of public and private partnerships for new investment opportunities. With adequate planning and management, increased heritage and nature tourism will, in turn, help preserve the unique character of the region. A priority will be to ensure that these kinds of tourism do not destroy the very resources that attract visitors in the first place. The success of the new National Heritage Area will be based on a balance between preservation and promotion.

Chapter 6

PLAN FOR MANAGEMENT ENTITY

Development of the concept of a Santa Cruz Valley National Heritage Area has involved a gradual transition from informal meetings of small numbers of local citizens to creation of a special-purpose, nonprofit organization to provide long-term leadership. In this process, other options were considered (see below, and also Chapter 9). The pending National Heritage Partnerships Act will require identification of the local management entity of a proposed National Heritage Area. This section outlines the structure and role of the proposed management entity for the Santa Cruz Valley National Heritage Area. Several different types of organizational structures are in place in the 24 existing National Heritage Areas. These other management concepts were assessed, and a local option was developed.

MANAGEMENT STRUCTURES OF EXISTING NATIONAL HERITAGE AREAS

The management entities of existing National Heritage Areas can be categorized into several types. The following comparisons are based on information obtained about the organizational structures of 15 of the 24 existing National Heritage Areas. In this sample, there are four types of management entities: (1) federally appointed commissions; (2) locally appointed commissions; (3) departments of public universities; and (4) nonprofit corporations. In all of these types of management entities, representatives of the National Park Service serve in non-voting (*ex officio*), advisory roles.

Federally Appointed Commissions

Several existing National Heritage Areas are managed by federally appointed commissions, with their operations administrated by National Park Service staff. Most of these National Heritage Areas were designated directly by Congress, and some operate under management plans prepared by the National Park Service. The number of commissioners on each of these management entities is usually between 15 and 30. Commission appointments are usually based on recommendations by Congressional delegations, and are designed to ensure representation of local municipalities, state agencies, business interests, economic development, tourism, historic preservation, outdoor recreation, and private landowners. Some of these commissions have formed nonprofit, 501(c)(3) corporations to build partnerships and to guide programs.

Examples

Blackstone Valley National Historic Corridor (Massachusetts and Rhode Island)

- ◆ Designated in 1986, second National Heritage Area in the country
- ◆ Managed by a 19-member, bi-state, federally appointed commission
- ◆ National Park Service staff administers operations and implements interpretive programs

Cache La Poudre River Corridor (Colorado)

- ◆ Designated in 1996
- ◆ Managed by a federally appointed commission
- ◆ “To guide programs,” commission designees formed a nonprofit, with 12 board members representing local governments, agricultural interests, and a state water conservation district

Cane River National Heritage Area (Louisiana)

- ◆ Designated in 1994
- ◆ Managed by a federally appointed commission, with 19 members representing municipalities, the state, business/tourism, preservation, hunting, river use, cultural heritage, and private landowners

Erie Canalway National Heritage Corridor (New York)

- ◆ Designated in 2000
- ◆ Managed by a federally appointed, 27-member commission, with appointments based on recommendations by the governor and the region’s Congressional delegation

Essex National Heritage Area (Massachusetts)

- ◆ Designated in 1996
- ◆ Managed by an 85-member, federally appointed commission representing municipalities, business, tourism, preservation, education, and environmental interests (26 additional members are state and federal legislators serving ex officio)
- ◆ An 18-member board of trustees represents local chambers of commerce, economic development, conventions/tourism, colleges, arts, nature conservation, museums, historic preservation, and private corporations
- ◆ A 23-member executive committee oversees operations

Locally Appointed Commissions

The Lackawanna Heritage Valley in Pennsylvania started as a state heritage area and later obtained a National Heritage Area status. It is managed by a state-certified municipal authority, with a county-appointed board of directors. The board of directors is advised and assisted by several committees representing varied local interest groups. Similarly, the management plan of the National Coal Heritage Area in West Virginia recommends that the Heritage Area be managed by a state-appointed commission in partnership with a new nonprofit corporation with a board of directors representing varied local interest groups.

Examples

Lackawanna Heritage Valley State and National Heritage Area (Pennsylvania)

- ◆ Designated in 2000

- ◆ Managed by a county-appointed commission with a 6-member board of directors representing the county, colleges, business, heritage destinations, historic preservation, economic development, and residents
- ◆ Advised and assisted by several committees:
 - Lackawanna Heritage Valley Roundtable (heritage attractions, tourism, preservation)
 - Lackawanna River Heritage Trail Management Committee (parks, recreation, business, boroughs, citizens)
 - Education Alliance (no information)

National Coal Heritage Area (West Virginia)

- ◆ Designated in 1996
- ◆ Currently developing management plan
- ◆ Management plan recommends that the National Coal Heritage Area be managed by a state-appointed commission in partnership with a new nonprofit representing various interests; some members would overlap

Departments of Public Universities

One existing National Heritage Area is managed by a department of a public university. The department is tax exempt, and funds are managed by the university foundation. The department is advised and directed by a 25-member board representing the state, counties, tourism, historic preservation, and other local interests. The board's 4-member executive council is composed of representatives of the governor, the state tourism agency, the State Historic Preservation Office, and the university department.

Example

Tennessee Civil War National Heritage Area (Tennessee)

- ◆ Designated in 1996
- ◆ Operations administrated by staff of the Center for Historic Preservation at Middle Tennessee State University (MTSU), a university department which also serves as the clearinghouse for federal funding; center funds are administrated and invested by the MTSU Foundation
- ◆ Center is advised by a 25-member Board of Advisors representing the state, counties, preservation, nature conservation, heritage destinations, and tourism. Board members are appointed based on recommendations from the governor, state tourism agency, and State Historic Preservation Office (SHPO)
- ◆ A 4-member executive council of the Board of Advisors includes representatives of governor, state tourism agency, SHPO, and the Center for Historic Preservation

Nonprofit Corporations

The most common management entities are nonprofit corporations with 501(c)(3) status with the Internal Revenue Service. These usually operate as public charities rather than private

foundations [the two types of 501(c)(3) organizations] because: (1) they receive substantial portions of their funding from governmental units, publicly supported organizations, and the general public; and (2) they receive more than one-third of their financial support from contributions, membership fees, and gross receipts from activities related to their tax-exempt functions, and normally receive less than one-third of their funding from investments. These nonprofits typically have boards of directors (or boards of trustees), with between 12 and 16 members, with executive committees of between five and seven members that oversee operations. Interests represented by board members often include counties, municipalities, state agencies, tourism, economic development, historic preservation, nature conservation, and residents. Board members usually participate in several planning committees. These nonprofits are usually assisted by advisory commissions, councils, or committees with broad representation of local interest groups, including counties, municipalities, tribes, state agencies, businesses, economic development, education, tourism, heritage attractions, arts, historic preservation, nature conservation, outdoor recreation, and private landowners.

Examples

Ohio & Erie Canalway National Heritage Corridor (Ohio)

- ◆ Designated in 1996
- ◆ Managed by a nonprofit, 501(c)(3) corporation with a 15-member board of directors representing four counties, city planning departments, parks, economic development, and tourism (National Park Service ex officio)
- ◆ A 5-member executive committee oversees operations
- ◆ Management entity partners with two other nonprofits on programs
- ◆ Assisted by several advisory committees with broad representation of local interest groups

Path of Progress National Heritage Tour Route (Pennsylvania)

- ◆ Designated in 1988
- ◆ Originally managed by a 21-member federally appointed commission
- ◆ Supporting legislation renewed in 1998
- ◆ Federally appointed commission now serves as the funding entity
- ◆ Now managed by a nonprofit 501(c)(3) corporation with a 6-member board of directors
- ◆ Nonprofit management entity also has a for-profit arm

Quinebag and Shetucket Rivers Valley National Heritage Corridor (Connecticut and Massachusetts)

- ◆ Designated in 1994
- ◆ Managed by private, nonprofit 501(c)(3) corporation with 16-member board representing local organizations and state officials
- ◆ Board members elected annually by membership
- ◆ Members participate in five planning committees
- ◆ Partners include the National Park Service, Connecticut Humanities Council, state historic commissions, state environmental protection and transportation agencies, and local economic development organizations
- ◆ Has several active committees with broad citizen participation

Shenandoah Valley Battlefields National Historic District (NHA) (Virginia)

- ◆ Designated in 1996
- ◆ Originally managed by a federally appointed commission
- ◆ Now managed by a nonprofit, 501(c)(3) corporation with a 23-member board of trustees representing varied interests, including the state, counties, municipalities, other nonprofits, and residents
- ◆ The nonprofit has the authority to provide federal funding to help local groups acquire Civil War sites; the only National Heritage Area with such authority

Silos and Smokestacks National Heritage Area (Iowa)

- ◆ Designated in 1996
- ◆ Managed by a nonprofit, 501(c)(3) corporation with a 12-member board of trustees representing municipalities, counties, colleges, parks, agricultural equipment manufacturers, preservation, and residents
- ◆ Advised by a non-voting committee of prominent Leadership Advisors representing the state, municipalities, businesses, and universities
- ◆ Receives recommendations for project funding from a 15-member Partnership Council representing heritage destinations, preservation societies, universities, farm bureau, and lodging

Wheeling National Heritage Area (West Virginia)

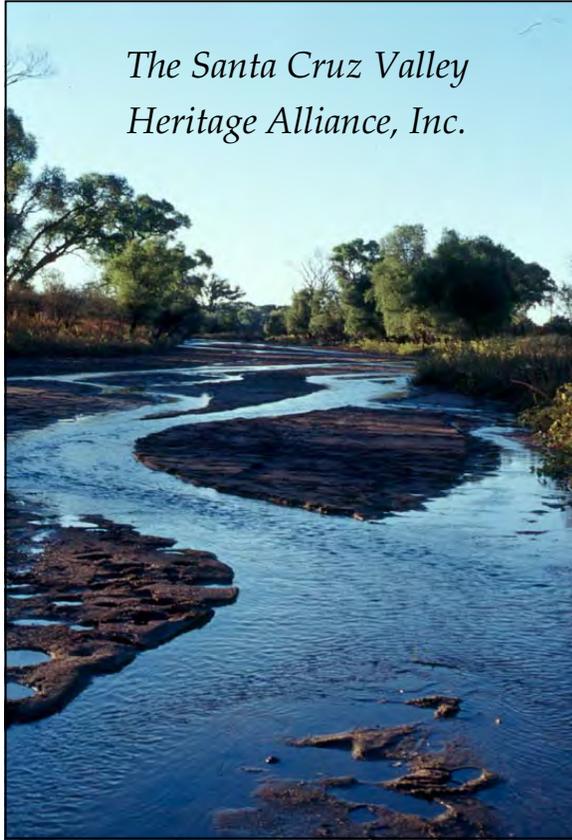
- ◆ Designated in 2000
- ◆ Managed by a nonprofit 501(c)(3) corporation with 12 board members representing city, county, and state
- ◆ A 9-member foundation helps with fundraising
- ◆ Management plan recommends creation of a 20-30 member Community Advisory Council

Yuma Crossing National Heritage Area (Arizona)

- ◆ Designated in 2000
- ◆ Managed by a nonprofit, 501(c)(3) corporation with an 11-member board of directors representing the city, county, state, tourism/economic development, historical societies, historic preservation, agriculture, residents, and the National Park Service (ex officio)
- ◆ A 7-member executive committee oversees operations; members include representatives of the city, tourism/economic development, historical society, agriculture, and residents.
- ◆ A large advisory commission represents a broad range of community interests

PLAN FOR MANAGEMENT ENTITY OF THE SANTA CRUZ VALLEY NATIONAL HERITAGE AREA

The organizational concept of the proposed management entity follows the nonprofit model used by the majority of existing National Heritage Areas. This nonprofit, 501(c)(3) corporation chartered in the State of Arizona includes a Board of Directors that is responsible for planning, fundraising, and staff hiring. The current board has reviewed various options and has approved



A new nonprofit corporation to develop the management plan after designation of the National Heritage Area.

Will be the management entity of the National Heritage Area.

The management entity will include representatives from local governments, tribes, business interests, preservation groups, and other stakeholders.

The management entity will develop priorities and objective criteria for selecting projects to support.

the general organizational structure and goals presented here. The board is currently seeking new members to ensure equitable representation of jurisdictions, interest groups, and cultures within the proposed boundaries of the National Heritage Area. Eventually, a smaller Executive Committee will be elected from among the board members to oversee operations and provide direction to staff. The staff will implement programs and coordinate the activities of the National Heritage Area. The Board of Directors will be advised and assisted by a relatively large Partnership Council whose members represent a broad range of local interests.

Board of Directors

In June of 2004, an Arizona not-for-profit entity, the Santa Cruz Valley Heritage Alliance, Inc., was incorporated, and a Board of Directors was selected. This board is currently composed of 24 representatives of varying interests from throughout the region, with an equal number from each of the two counties within the proposed National Heritage Area. This board is currently applying for 501(c)(3) status, developing a two-year budget, and selecting new board members.

Current Board of Directors

- ◆ Its 24 members are evenly divided between the two counties in the proposed National Heritage Area, and represent a broad spectrum of local interests.
- ◆ Applying for 501(c)(3) status

- ◆ Developing a 2-year budget
- ◆ Selecting new board members.

A goal of the current, 24-member Board of Directors is to transition to a smaller board with a structure that equitably represents the two counties within the proposed boundaries of the National Heritage Area, as well as a composition which reflects the cultural diversity of the Santa Cruz Valley. The planned structure to achieve this goal is a board with 12 members (11 voting members and a non-voting National Park Service representative). Board members will include a representative of the National Park Service (the Superintendent of Tumacácori National Historical Park, serving in an ex officio role as the local partner of the National Heritage Area), a representative of the State of Arizona (appointed by the Arizona State Parks department), representatives of both counties (appointed by the respective county Boards of Supervisors), and eight at-large members representing some combination of the following interests: municipalities, Native American tribes, tourism/economic development, ranching, agriculture, historic preservation, nature conservation, and culture/arts.

In this structure, the full board will meet at least quarterly, with primary functions to include planning, fundraising, and staff hiring. Officers will be elected annually. Six members of the board will be elected to serve as an Executive Committee that will meet monthly to oversee operations and provide direction to staff (see below). The board will be advised and assisted by a large Partnership Council representing a broad spectrum of local interests (see below).

Pre-designation tasks for the Board of Directors include: (1) continued public outreach; (2) communication with the legislators sponsoring the designation bill; (3) organization of local support for the designation bill; (4) initiation of some programs to demonstrate the potential effectiveness of partnerships developed by the Alliance, and to raise the profile of the proposed National Heritage Area; (5) fundraising to support these activities; and (6) hiring of staff to coordinate these activities, following the necessary fundraising. After designation, the most important board tasks, initially, will be to identify the scope of work and to perform a review role during preparation of the Management Plan.

Structure and Roles of Board of Directors

- ◆ 12 members (11 voting members)
 - 1 Pima County Board of Supervisors
 - 1 Santa Cruz County Board of Supervisors
 - 1 State of Arizona (State Parks?)
 - 1 National Park Service (non-voting)
 - 8 at-large members representing the following interests:
 - Municipalities
 - Native American tribes
 - Ranching/ Agriculture
 - Tourism/Economic development
 - Historic Preservation
 - Nature Conservation
 - Culture/ Arts
- ◆ Elects a 6-member Executive Committee that meets monthly to oversee operations and provide direction to staff

- ◆ Meets at least quarterly
- ◆ Conducts planning
- ◆ Continues public outreach
- ◆ Communicates with legislators sponsoring designation bill
- ◆ Organizes local support for designation bill
- ◆ Initiates programs
- ◆ Conducts fundraising
- ◆ Identifies scope of work and performs review role for Management Plan
- ◆ Hires staff
- ◆ Receives recommendations from the Partnership Council for funding and other support of projects and programs (see below)

Staff

The staff of the management entity will identify possible funding sources, prepare grant proposals, coordinate fundraising, conduct public outreach, liason with legislators, help build and support partnerships, develop and maintain a website, and develop and implement programs. A goal is to hire the first staff in 2005, to begin some of these activities prior to designation. After designation, the staff will coordinate preparation of the Management Plan.

Structure and Roles of Staff

- ◆ Positions will be funded by a combination of donations from local governments, businesses, and foundations and matching funds from annual Congressional appropriations to the National Heritage Area.
- ◆ The goal is to hire the first staff person in 2005.
- ◆ Obtains certifications for Arizona Office of Tourism TEAM funds and state Heritage Fund grants
- ◆ Writes grant proposals
- ◆ Coordinates public outreach
- ◆ Coordinates fundraising
- ◆ Serves as liason with Congressional legislators
- ◆ Develops content for website
- ◆ Develops programs

Possible Programs in 2005

- ◆ Santa Cruz Valley Heritage Festival
- ◆ Santa Cruz Valley Birding and Nature Festival
- ◆ Photography contest that leads to a calendar for sale
- ◆ Regional music preservation project that leads to CD for sale
- ◆ Second phase of Kino Fruit Trees Project
- ◆ Coordinates preparation of Management Plan



Stakeholders in National Heritage Areas include governments, local residents, landowners, tribes, neighborhoods, and nonprofit organizations.



Partnership Council

To ensure a broad range of local interests are represented in the management of the National Heritage Area, the Board of Directors will be advised and assisted by a 20-30 member Partnership Council that represents a broad range of local interests, including municipalities, Native American tribes, ranching, agriculture, historic preservation, nature conservation, culture/arts, education, parks, outdoor recreation, tourism/economic development, lodging, restaurants, transportation, private landowners, and others. Local units of the National Park Service, the National Forest Service, and the Bureau of Land Management will serve in advisory roles. This council will review and recommend projects and programs for funding and other assistance from the National Heritage Area, and will identify potential partnerships between the National Heritage Area and government agencies, nonprofits, and other local stakeholders to help achieve long-term goals. The council will have committees for identifying long-term funding needs and priorities, planning festivals and events sponsored by the National Heritage Area, and conducting public outreach.

Structure and Roles of Partnership Council

- ◆ Broadly representative group assembled to advise Alliance Board by January 2005
- ◆ Identifies potential partnerships with the National Heritage Area

- ◆ Reviews and selects projects and programs to be assisted by the National Heritage Area; recommendations are provided to the Board of Directors.
- ◆ Identifies long-term funding needs and priorities
- ◆ Plans festivals and other events sponsored by the National Heritage Area
- ◆ Conducts public outreach

RATIONALE FOR MANAGEMENT ENTITY PLAN

Input from stakeholder meetings and a large number of supporting entities and individuals indicate strong support for the concept of a new local organization that will develop and manage the Santa Cruz Valley National Heritage Area. The unique purpose of this organization is to serve as the local coordinating entity for the National Heritage Area. This mission will require a very focused approach to planning and management over the long term.

While representatives of local governments will be involved, the need for this management entity to be broadly representative of local interests requires that it operate independently. The management entity should be designed to operate outside the influence of the often-changing political environment to be as responsive as possible to the changing needs of local residents and interest groups. Operating as a separate nonprofit, tax-exempt corporation, the management entity can most effectively approach individuals, corporations, foundations, and government funding sources for both operating and programmatic funds. An independent nonprofit will also be able to collaborate effectively with other entities in the region—government agencies, other nonprofits, and private foundations.

The organizational structure of the management entity outlined here—including a medium-sized Board of Directors, a small Executive Committee, staff positions with specified roles, and an inclusive Partnership Council—will allow for efficient planning and operations responsive to the needs and inputs of a broad spectrum of local stakeholders.

Chapter 7

CONCEPTUAL FINANCIAL PLAN

This conceptual financial plan for the proposed Santa Cruz Valley National Heritage Area addresses a number of areas critical to ensuring the long-term economic sustainability of the National Heritage Area:

- ◆ capability to fund – through both earned and unearned income;
- ◆ operating budgets for the first two years;
- ◆ funding strategy;
- ◆ special recommendations regarding economic sustainability; and
- ◆ consistency with continued economic activity within the region.

CAPABILITY TO FUND

Southern Arizona has a strong history of giving to nonprofit projects and causes. This is demonstrated by the existence of over 2,000 nonprofit entities within the region today. The viability of these groups varies as to mission, ability to fundraise, skills of management, commitment of the respective board of directors, and a variety of other factors.

Within the cultural and heritage community, the list of givers tends to focus on the arts – performing and otherwise. Resources that represent a combination of heritage-culture-nature, which are the focus of the National Heritage Area, do not currently constitute a large number of organizations. Several organizations concentrate primarily on the natural world, such as the Arizona Sonora Desert Museum, the Tucson Botanical Gardens, and Tohono Chul Park. The Arizona Historical Society, the Pimería Alta Historical Society, the Tubac Historical Society, and the Arizona State Museum concentrate upon historical and heritage displays, collections, research, and interpretation.

A National Heritage Area will be in a unique position to create partnerships with these existing organizations. The challenge for the proposed management entity, the nonprofit Santa Cruz Valley Heritage Alliance, Inc. (Alliance; see Chapter 6), will be to leverage the substantial experience and finances of these existing institutions to create new opportunities. The federal funding will be an important catalyst to encourage such cooperation, but the effectiveness of the Alliance leadership will be a key to success in this area. Opportunities for new or smaller organizations must also be created.

Research has shown that approximately 1,200 foundations and other entities are funding nonprofit groups across Arizona. Further analysis revealed that 106 entities, from Arizona and across the country, are candidates to provide financial support of the National Heritage Area in the future (see list below). All 106 have a history of giving to similar projects related to nature conservation, cultural/heritage preservation, and environmental or heritage education within the state – many within southern Arizona.

Volunteerism is also an indication of the interest in giving – both time and money – to ensure the sustainability of nonprofit organizations. A large number of volunteers in Pima and Santa

Cruz counties contribute to local nonprofits. Additionally, most local, comparable nonprofit entities maintain a vibrant and consistent level of membership, further indicating strong citizen support.

Many grant programs at the state and national level are likely sources of funding. Transportation enhancement grants, Arizona Heritage Fund grants, and Arizona Office of Tourism funding will be given top priority. Collaboration with other programs that share key elements of the heritage area mission, such as Certified Local Governments or Arizona Main Street programs, will also be considered. Both of these examples depend on grassroots support and could provide important assistance in building strong partnerships.

Cultivation of relationships with individuals and corporations will be based on promoting the overall mission of the heritage area – both its heritage and nature resources and its economic potential. The income potential of these relationships will require time to develop, but they must be initiated as soon as possible.

The first critical test of the Alliance’s funding capacity has already been passed successfully. To prepare this feasibility study, very broad grassroots support was obtained, and all major municipalities and several private sector sources provided funding. The Arizona Office of Tourism and the Metropolitan Tucson Convention and Visitors Bureau were also major contributors. The broad mutual benefits that can be derived from a National Heritage Area were keys to gaining the financial support of such a broad constituency.

EARNED INCOME POLICIES

The Alliance will immediately begin to build a base of earned income to ensure the economic sustainability of the organization and its programs. The 15-year period during which federal support is provided to a heritage area will provide adequate time for this, although it must be pursued from the outset.

Memberships

Memberships will be a significant source of earned income for the National Heritage Area. A variety of different membership categories will be established to appeal to a diverse group of interests. Membership fees and benefits will vary by category. Categories of memberships such as the following will be considered: Student, Senior, Individual, Family, Friends, River Watchers, River Keepers, Society de Kino, and Society de Anza. In particular, corporate memberships will be solicited to meet initial revenue targets from memberships.

Educational Programs

Over the long term, the Alliance will offer a variety of educational programs, many of which may be fee based. Programs provided to adults will be charged an amount that will, at minimum, cover all costs. The intention of the Alliance is to provide programs to children free of charge.

Training Institute

In collaboration with the nature and heritage attractions throughout the National Heritage Area, the Alliance will develop the Santa Cruz Valley Nature and Heritage Training Institute targeting existing and potential employees and volunteers of those attractions. The Alliance will likely derive some positive cash flow from the operation of the training institute. The curriculum of the institute will be directed to entry-level skills, career upgrading, and management-level training, and will be comprised of a variety of programs and skill sets such as the following:

- ◆ customer service;
- ◆ interpretive skills development;
- ◆ nonprofit management skills in human resources, accounting, and other areas; and
- ◆ fundraising techniques.

TRADEMARK AND REVENUES

The National Heritage Area will constitute a unique region, and application to the U.S. Patent and Trademark Office will be made for trademark protection of the name. Any special National Heritage Area logo will also be protected. With such protection, the Alliance can use the mark on a variety of products, services, and marketing materials from which revenues can be generated, and at the same time, protect the use of the names from infringement and use by others.

Examples of potential proprietary (trademark-protected) items include: shirts, cups, collectibles, banners, decals, brochures, interpretive guides, calendars, stationery, replicas of prehistoric artifacts and historical items such as pottery or furniture, artwork, items donated to the Alliance by artists, recordings (storytelling, histories, DVD, video, and audio), and marketing materials. Proprietary services could include: certain festivals, educational programs, advertising, tours, and so forth. Over time, these products and services can generate modest revenues for the National Heritage Area, and the organization should plan to ensure that such products and services generate revenue.

UNEARNED INCOME POLICIES

A large portion of the revenues to support the ongoing operations of the Alliance will come from unearned income such as donations, endowments, and grants.

A Variety of Revenue Sources

A variety of revenue sources will be critical to ensure the economic sustainability of the National Heritage Area. Income must be generated annually from sources such as contributions, grants, gifts, and endowments from foundations, government programs, corporations, and individuals. Included in the staffing of the Alliance will be a development director to plan and implement fundraising activities to:

- ◆ assist with startup funding for the organization, and
- ◆ provide annual operating revenue.

Potential Sources of Grants

The list below of 106 organizations was gathered from the Arizona Guide to Grants and Giving (2003). The guide indicates that all of these organizations have, in the recent past, funded not-for-profit projects in Arizona in areas such as heritage, culture, and nature. These resources represent sources of potential funding for the proposed National Heritage Area. These organizations have provided funding for operating capital, educational programs, mentoring programs, and volunteer programs—all types of funding that will be necessary for the operation of the National Heritage Area.

Potential Sources of Grant Funding for the Proposed National Heritage Area (Each organization is a foundation unless otherwise indicated)

Abelard West	Alcoa	American Express
American Honda	Arizona Cardinals	Arizona Commission on the Arts
Arizona Community	APS	Arizona Humanities Council
Arizona State Parks	AT&T	BankOne, Arizona
Berger	Brown family	Canyon Ranch
Caterpillar	Central Arizona Project	Chevron Texaco
Citicorp	Claiborne	Dorrance Family
Dreyfus	Dubow	El Paso Energy
Ford	Fox 11	Frueauff
Gate Family	General Service	Getty Trust
Goldberg Charitable	Goldman Fund	Green, G. M.
Green Valley Communications	Harris	Hearst
Hewlett	Homeland	IBM International
Jones, W.A.	Katzenberger	Kresge
Kress	Lannan	Lilly
Lilly Endowment	Lucent Technology	MacArthur, J & C
Marley, K & E	Martin, Bert W.	McCune Charitable
McKnight	Mellon	Merrill Lynch
Moeller, W & J	Morris, M. T.	Mott
Murphey, J & H	Nason family	NEET
National Fish/Wildlife	Ottosen family	Packard
Patagonia, Inc.	Pew Charitable Trusts	Phelps Dodge
Pinnacle West	Proctor & Gamble Fund	Quinney
Qwest	Reese family	Robidoux
Rockefeller	Rotary Club of Tucson	Roth Family
Ruth	Shurtz	Simpson
Smith, Ralph	Soc. Venture Part./AZ	SW Gas Corporation
SW-Educ/Hist Pres.	Stang	Stardust
Steele	Stewart, H&M	Stocker
Summerlee	Sundt	Surdna
Taylor, E. R.	Town Creek	TEP
Turner	Union Pacific	Unity Ave.
Van Denburgh	Viad Corporation Fund	Wallace Genetic
Walton Family	Warsh-Mott Legacy Fund	Wells Fargo Arizona
Wharton	Wilberforce	Wilson, Robt.T.
Wyss	Zicarelli	

The Alliance will also review a variety of public programs at the state and federal levels to identify other sources of funding for the operations, programs, and events conducted by the Alliance. Of major interest will be programs from the National Park Service (including the National Heritage Area program itself; see below); the National Trust for Historic Preservation; the Preserve America and Save America's Treasures programs; Fish and Wildlife Service programs; the Arizona Heritage Fund; Urban Access programs from a variety of Federal sources; Community Development programs; and others. Of special note is the recently established federal website: www.grants.gov as a source to access federal programs. The Alliance will also work closely with the two local tribal nations – the Tohono O'odham Nation and the Pasqua Yaqui Tribe – to identify potential grants that can assist the National Heritage Area.

FEDERAL MATCH FUNDING

The proposed Santa Cruz Valley National Heritage Area intends to create a competitive program through which local communities, projects, nonprofits, and other qualified organizations can access the match funding that will eventually be appropriated to the National Heritage Area from Congress through the National Park Service. The Alliance program will be guided by a management plan with regularly updated 5-year strategies developed with input from numerous public meetings and other sources. Further, it will set criteria for eligibility, funding amounts, types of projects to be funded, and monitoring and evaluation processes. Each year, the Alliance will accept proposals and



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Through the National Park Service, up to \$10 million in 50-percent match funding is available to a National Heritage Area over a period of 15 years.

create a list of priority projects for following year funding. Local sources of match funding will be identified and combined to create a total local match. The total match-funding need (contained within the mandated \$1,000,000 federal funding limit) will then be transmitted to the National Park Service and our Congressional delegation for inclusion in the next year's federal budget. We intend to approach this funding source (and all others) with careful planning to assure that the National Heritage Area can show real results and will significantly aid preservation, protection, and promotion of the heritage and nature resources within the area.

OPERATING BUDGETS FOR FIRST TWO YEARS

The Alliance will begin operating prior to Congressional decisions regarding the designation of the Santa Cruz Valley National Heritage Area. The first year is a particularly important one

for the Alliance to establish itself as a viable organization to lead in development of the heritage area. Therefore, operating budgets have been prepared for two years. It is assumed that National Heritage Area designation will be achieved in the second year, and the second-year budget assumes an input of \$250,000 from the National Park Service to prepare a Management Plan for the new heritage area. Additionally, the Alliance commits to collaborating with other organizations, as appropriate, to share staff, space, and operational items to run the most cost effective operation possible.

During the first year of operation, efforts will focus on raising awareness of the Alliance and the planned National Heritage Area. Staffing and operational costs will remain at minimal levels during this period, with only one administrative staff person being hired and office space being donated. This first year will focus on several tasks:

- ◆ continued public outreach;
- ◆ fundraising;
- ◆ development of a logo;
- ◆ development of a website;
- ◆ certification by Arizona Office of Tourism for TEAM funds;
- ◆ development of an annual Santa Cruz Valley Heritage Festival that will rotate from site to site over the years and will emphasize traditional crafts, food, and music of the region;
- ◆ development of a CD of traditional music from the region;
- ◆ implementation of a photographic contest, with winning entries being incorporated in a calendar, for sale; and
- ◆ support of the second phase of the Kino Fruit Trees Project to reestablish Spanish-period fruit tree stocks at Tumacácori National Historical Park and other public parks in the region.

Table 7.1. Proposed budget for Year 1 (2005) income.

Source	Amount
Municipal governments	\$ 51,000
Private support	15,000
Grants	10,000
Memberships	5,000
Earned income	3,000
Program support	20,000
In-kind and volunteer (non-cash)	20,000
Total income	124,000
Cash income	104,000

Table 7.2. Proposed budget for Year 1 (2005) expenses.

Budget Item	Amount	Notes
Salaries and Wages		
Administrative staff	\$ 42,000	One full-time
Subtotal: salaries and wages	42,000	
Contracted Services	9,000	Bookkeeping; legal services
Expenses		
Travel	5,000	
Insurance	5,000	
Office rental	-	Donated
Office operations	2,000	Equipment rental; supplies
Printing and postage	7,000	
Program expenses	20,000	
Subtotal: expenses	43,500	
Employee costs	10,500	25 percent of salaries and wages
Total expenses	102,000	

The second full year of operations will require a staff of four and will include initiation of a grant program to assist local heritage and nature projects. This grant program will be developed under the criteria elaborated in the National Heritage Area Management Plan. Under the full-operation scenario, the Alliance will expand the number and variety of programs and activities that are provided within the National Heritage Area. These programs may include, but not be limited to, the following:

- ◆ an annual (or semiannual) Santa Cruz Valley Western Film Festival, highlighting the many films made in the Santa Cruz Valley;
- ◆ an annual Santa Cruz Valley Birding and Nature Festival;
- ◆ creation of the Santa Cruz Valley Nature and Heritage Training Institute—a curriculum of educational and training programs targeting the present and future workforce development needs of the heritage and nature organizations and attractions throughout the National Heritage Area; and
- ◆ a variety of heritage education and environmental education programs for elementary schools in the region.

Table 7.3. Proposed budget for Year 2 (2006) income.

Source	Amount
Municipal governments	\$ 51,000
Private source	30,000
Grants	120,000
Memberships	10,000
Earned income	6,000
In-kind and volunteer (non-cash)	40,000
National Park Service	250,000
Total income	526,000
Cash income	486,000

Table 7.4. Proposed budget for Year 2 (2006) expenses.

Budget Item	Amount	Notes
Salaries and Wages	\$188,000	Four full-time
Contracted Services		
Bookkeeping and legal	18,000	
Management plan consultants	75,000	Specialists for management plan
Subtotal: contracted services	93,000	
Expenses		
Travel	8,000	
Insurance	10,000	
Office rental	20,000	1,000 ft ² (\$20/ft ²)
Office operations	12,200	Equipment rental; supplies
Printing and postage	9,600	
Program expenses	50,000	
Management plan expenses	35,000	Planning conference; print plan
Subtotal: expenses	144,800	
Employee costs	47,000	25 percent of salaries and wages
Total expenses	472,800	

INITIAL REVENUE SOURCES

The Alliance will rely heavily on local governments and grants during its first two years. In the second year, the Alliance will request funding of \$250,000 from the United States

Department of Interior for development of a Management Plan, to be completed within three years. This federal funding will be matched by local sources; this match will come from local governments, foundations, and the private sector.

FUNDING STRATEGY

The Alliance has already initiated a fundraising program to meet immediate needs and to build a secure source of funds to cover long-term operations. Initial elements planned for this fundraising program include, but are not limited, to the following.

- ◆ Local governments from within the two counties have provided support for this Feasibility Study and will be asked to provide regularly budgeted funding for the operation of the Alliance.
- ◆ The Alliance Board of Directors will take on initial responsibility for fundraising.

Some examples of locally selected projects that could receive funding:



Roadside pullouts and signs at important sites and scenic views.

Construction of erosion control structures on rangelands.



Restoration of riparian areas.



Stabilization or rehabilitation of historic buildings.

Educational materials and programs for schoolchildren.

- ◆ The 106 foundations identified thus far will be screened for likelihood of initial support, and a smaller list of some 10-12 high-probability candidates will be contacted. Grant proposals will be prepared and submitted to the foundations that indicate an interest in supporting the Alliance, or in specific projects that are being initiated by the Alliance.
- ◆ Government grants – opportunities for funding through state and federal grant programs or through Native American tribes – will be pursued. Transportation Enhancement grants, Arizona Heritage Fund grants, and funding from the Arizona Office of Tourism will be given high priority.
- ◆ Corporate relationships will be built through working with corporations that are likely to benefit from implementation of the heritage area; most are likely to be locally based, small corporations. However, some national corporations will also be contacted.
- ◆ Individuals with interests in regional heritage or nature resource issues will be identified and invited to become members of the Alliance, either as board members or as members of the Partnership Council. Relationships with members will be cultivated to encourage higher levels of support from those who share a belief in the mission of the Alliance and who have the capacity to give.
- ◆ Maximization of earned income is paramount, and the Alliance will concentrate on ways to generate dependable revenue from programs as early as possible.
- ◆ A successful fundraising program must be integrated with an effective marketing campaign for the National Heritage Area, which will be initiated as quickly as possible.

CONSIDERATION OF THE ECONOMIC SUSTAINABILITY OF THE HERITAGE AREA

A number of programs or concepts are already being developed within the region that could benefit the Alliance over the long term. The Alliance will participate in several of these undertakings, because they will likely expand funding opportunities in the years ahead.

STATE FUNDING SOURCES

An important source of operating for the National Heritage Area will be from the State of Arizona. The Alliance will work with local governments to access various state-level sources of funding such as the Arizona Heritage Fund, the Arizona Office of Tourism, the Arizona State Parks agency, and Arizona Game and Fish Department.

2012 STATEHOOD CELEBRATION

The National Heritage Area will join the process that is already underway to plan the celebration of Arizona statehood, to occur in 2012. The National Heritage Area will be fully developed prior to 2012, and because it represents the earliest history of the state, the Alliance and its members will seek an active role in that celebration.

STATE HERITAGE AREAS

The Arizona State Historic Preservation Office is already exploring the concept of a system of state heritage areas. Such a program would serve to create an integrated process for recognizing regional heritage themes and should provide at least some level of funding to support the promotion of such areas at the state level.

PIMA COUNTY HERITAGE/CULTURAL TAX

The nature/heritage/cultural community of Pima County has begun a process that may lead to the recommendation for passage of a countywide tax to assist in building and maintaining a strong and financially stable nature/heritage/cultural community. The Alliance will be active in the process for passage of such a revenue source.

CONSISTENCY OF FINANCIAL PLAN WITH CONTINUED ECONOMIC ACTIVITY WITHIN THE REGION

The development of the Santa Cruz Valley National Heritage Area and this conceptual financial plan are consistent with the continued economic activity within this two-county region. The region already has a strong nature and heritage tourism economic sector, as demonstrated by the number of tourist visits (over 4.5 million visitors in 2002) and dollars (over \$1.8 billion in 2002) currently received in southern Arizona (see also Chapter 5). The quality and diversity of the natural and cultural resources described in this feasibility study support the premise that there is still an enormous potential for expansion of this sector of the regional economy.

A number of studies conducted by local governments and by the Arizona university system demonstrate this economic impact and opportunity. The following are especially important studies of note.

- ◆ Metropolitan Arizona Visitor Study, Behavior Research Center (2000)
- ◆ Sonoran Desert Conservation Plan, Pima County (2001)
- ◆ Arts in Tucson's Economy, University of Arizona (2001)
- ◆ The Economic Impact of Arizona's State Parks, Northern Arizona University (2002)
- ◆ Economic Impacts of Mexican Visitors to Arizona in 2001, University of Arizona (2002)
- ◆ Tucson Origins Heritage Park Master Plan, City of Tucson (2004)

Designation of a Santa Cruz Valley National Heritage Area will provide the various governments, tourism operations, nature/heritage/cultural nonprofits, and businesses the opportunity to collaborate to create a vital and vibrant region where our nature and heritage resources are preserved, protected, and promoted in a unique and economically beneficial way.

SUMMARY

This conceptual financial plan for the proposed Santa Cruz Valley National Heritage Area addresses the needs of the National Heritage Area and its local coordinating entity, the Santa Cruz Valley Heritage Alliance, Inc. It also outlines the roles of the various potential funding sources and provides a strategy to ensure the economic sustainability of the National Heritage Area. Fully adopting and implementing this financial plan will allow the alliance to ensure the distinctive landscapes and resources of the heritage area are recognized, protected, enhanced, and interpreted to improve the quality of life for residents, and also to ensure opportunities for public appreciation, education, enjoyment, and economic sustainability.

Chapter 8

EVALUATION ACCORDING TO FEASIBILITY CRITERIA

If enacted, the National Heritage Partnerships Act will formalize the feasibility/suitability requirements of proposed National Heritage Areas. These are expected to be similar to the National Park Service's currently suggested criteria for assessing the eligibility of a region for designation. According to those suggestions, a suitability/feasibility study should include analysis and documentation for the following 10 criteria.

- (1) The area has an assemblage of natural, historic or cultural resources that together represent distinctive aspects of American heritage worthy of recognition, conservation, interpretation, and continuing use, and are best managed as such an assemblage through partnerships among public and private entities, and by combining diverse and sometimes noncontiguous resources and active communities.**

Section 3 of this Feasibility Study identifies the assemblage of heritage, nature, open-space, and outdoor recreational resources within the proposed Santa Cruz Valley National Heritage Area. These resources are significant at both the regional and national levels, and together, they represent and convey the unique contribution of the Santa Cruz Valley to American heritage. This region was the center of some 12,000 years of Native American cultural developments; a corridor of Spanish exploration, colonization, and missionary activity; a frontier of Mexican and early American mining, ranching, and agriculture; and a fertile ground for the development of a United States-Mexico borderland culture. These and other regional themes are important parts of the national story not told in any existing National Heritage Area.

The resources related to these themes are therefore deserving of national recognition, and their conservation, interpretation, and continuing use is in the national interest. Management under the framework of a National Heritage Area would link related resources to better preserve them and tell their stories, and would be built on community-based, voluntary partnerships among public and private stakeholders. Currently separate conservation and interpretation efforts could be coordinated through regional planning within a National Heritage Area structure. A National Heritage Area designation would also provide increased opportunities for combining existing funding with new sources, and would help tell the important stories of this region to visitors from other states and countries.

- (2) The area reflects traditions, customs, beliefs, and folk life that are a valuable part of the national story.**

The Santa Cruz Valley has many flourishing cultural traditions that are important parts of the national story. The particular combination of Native American, Spanish, Mexican, and American Old West customs, crafts, music styles, foods, and other types of folk life that are maintained and celebrated here cannot be found in any other region of the United States. The

distinctive mix of folk traditions in the Santa Cruz Valley is a result of its long history as a desert frontier and borderland corridor. It represents the Spanish Colonial and Mexican periods in the history of the Southwest, which are less well-known, but important, counterparts to English and French colonialism in North America and the early history of the United States.

This region has been the focus of the nation's attention several times: during the search for a possible railroad route from the Rio Grande to California as part of the Gadsden Purchase negotiation after the Mexican-American War, during a series of gold and silver rushes after the California Gold Rush played out, and during the Apache Wars and campaigns against Pancho Villa. Beginning in the 1880s, this became one of the leading copper-producing regions in the nation. With its dry air and warm climate, this region has been a destination for health seekers since the 1890s, and since the 1920s, local guest ranches have drawn visitors searching for a taste of the Old West. The dramatic landscapes of this valley have been etched into the minds of generations of Americans by hundreds of Western films made here since the 1930s. This region is internationally renowned as a leading center of research in desert ecology, climate history research, archaeology, astronomy, and optics. In sum, the Santa Cruz Valley has been the stage of important moments and movements in the national experience, and its scenic landscapes, colorful history, and vibrant folk traditions are fundamental parts of the national consciousness and character.

(3) The area provides outstanding opportunities to conserve natural, cultural, historic, and/or scenic features.

The wealth of heritage, nature, and scenic resources in the Santa Cruz Valley is considerable, and there are a number of existing and planned programs and projects to conserve them. Many of these efforts involve partnerships between private organizations and government agencies, and they receive funding from both government and private sources.

Examples of New Conservation Activities in the Proposed National Heritage Area

- ◆ The land base of Tumacácori National Historical Park has been expanded by 300 acres to include a portion of the Santa Cruz River, as well as the historic orchard and spring that supported the mission.
- ◆ The National Park Service is developing partnerships with local governments and nonprofit groups to develop the Juan Bautista de Anza National Historic Trail along the Santa Cruz River.
- ◆ The National Park Service and the University of Arizona are working together to inventory five native cat species in southern Arizona, and to develop a management plan for their survival.
- ◆ Coronado National Forest is revising its Forest Land and Resources Management Plan.
- ◆ The Arizona State Parks department is developing the new San Rafael State Park and Natural Area, has recently expanded its Sonoita Creek State Natural Area, and is

developing plans to expand Catalina State Park, and is negotiating the purchase of conservation easements on properties along the Santa Cruz River.

- ◆ Pima County's Sonoran Desert Conservation Plan is working to preserve critical wildlife habitats, riparian areas, open spaces, working ranches, historic buildings, and archaeological sites in the Santa Cruz Valley through purchases of properties and conservation easements with public bond funding.
- ◆ In the Paseo de Las Iglesias project, Pima County and the Army Corps of Engineers are planning the restoration of the Santa Cruz River flow and riparian habitats between the San Xavier mission and the City of Tucson over a distance of approximately seven miles.
- ◆ Using its allotment from the Cental Arizona Project canal, the San Xavier District of the Tohono O'odham Nation is reviving irrigated farming and restoring a riparian area in the river floodplain.
- ◆ The City of Tucson is developing the Tucson Origins Heritage Park, including partial reconstructions of the Spanish period mission and presidio, and is planning an archaeological park on a prehistoric site.
- ◆ The City of Marana is developing the Marana Heritage Park, an archaeological park on a prehistoric site, and is also working with the Tucson Audubon Society to restore riparian areas along the Santa Cruz River.
- ◆ The City of Nogales is working with Friends of the Santa Cruz River to restore a riparian area along South River Road.
- ◆ The Empire Ranch Foundation is restoring buildings of a historic ranch in the Cienega Valley.
- ◆ The Arizona Nature Conservancy is conducting an ongoing species inventory in its Patagonia-Sonoita Creek Preserve, and is working to broker conservation easements between private landowners and the Arizona State Parks department on properties along the Santa Cruz River.

Currently, these and other conservation activities in the region have a project-specific focus and involve a small number of partnerships and funding sources. Communication and coordination among these projects is limited. Designation of a National Heritage Area will provide a more effective framework to coordinate partnerships among various levels of government and different kinds of private-sector involvement. Through a National Heritage Area framework, public and private funding sources will also be combined more effectively, and a regional planning process will allow better long-term management of resources on a voluntary basis. In sum, the designation of a Santa Cruz Valley National Heritage Area will provide new opportunities for voluntary resource conservation, allow more effective planning and funding for conservation, and will create a synergy between ongoing conservation activities.

(4) The area provides outstanding recreational and educational opportunities.

The outdoor recreational resources of the Santa Cruz Valley were summarized in Chapter 3 of this Feasibility Study. Among those resources are 1.5 million acres of public lands, 2 National Parks, 4 state parks, 6 large county parks, 4 major lakes, 2 designated scenic highways, more than 600 miles of backcountry trails, about 500 miles of urban bikeways, 14 developed campgrounds, and 37 highly rated birdwatching spots. These and other recreational resources significantly contribute to the quality of life for area residents and are a major draw for visitors from other states and countries.

Several educational programs about the cultural and natural history of the region are operated by government agencies and private organizations. All the national and state park units and most of the 32 museums related to local nature or heritage have interpretive signs, printed guides, and docents. Many of them also have exhibits and websites, and some have classroom outreach programs. Newsletters, websites, tours, lectures, and other educational media and events are sponsored by many of the 20 nature-related organizations, 16 outdoor recreation organizations, and 32 heritage organizations in the proposed National Heritage Area. Educational exhibits are included in many of the 10 nature-themed annual events and 40 heritage and cultural annual events in the region. Pima County, the City of Tucson, the Town of Marana, and the Town of Oro Valley are all developing heritage parks focused on interpreting local history and cultural traditions.

While there are many recreational and educational resources and activities in the region, many local residents, civic leaders, and visitors are inadequately informed about their availabilities. Most recreational areas need more facilities and maintenance, and there are many important historic sites and natural areas in need of identification, study, and interpretation. Often, related resources are not linked through regional guides or interpretive materials. A National Heritage Area framework will create many new opportunities to improve and maintain recreational facilities, and to develop new interpretive materials, exhibits, and programs to educate the public about the unique environment and cultural history of this region.

Possible Educational Programs of the Proposed National Heritage Area

- ◆ Educational programs for school age students that integrate the stories of the regions natural and cultural sites and places them in a broader regional context.
- ◆ Web sites that offer regional educational resources and link together the area's stories.
- ◆ Intergenerational learning programs that explore the area's cultural and natural heritage.
- ◆ Lecture and speakers programs that provide regional or cross-disciplinary perspectives.
- ◆ Leadership programs that offer tours of the region's heritage sites and resources to emerging community leaders and young professionals.
- ◆ "Doors Open Days" when local cultural and natural sites invite the community in for free tours and special behind-the-scenes programs.

- ◆ A regional volunteer corps to monitor and care for heritage resources and spread the word.

(5) Resources that are important to the identified theme or themes of the area retain a degree of integrity capable of supporting interpretation.

An important criterion for inclusion in the inventory of significant heritage sites and nature resources in Chapters 3 and 4, as well as in Appendices A-C, was that they retain sufficient integrity to convey their significance and to support interpretation. Because this level of integrity was a requirement for inclusion, a large number of heritage sites in this inventory are currently listed on the National Register of Historic Places, and almost all of the others are judged to be eligible for inclusion. In addition to being well preserved, many of the listed heritage sites are open to the public. Similarly, most of the listed nature resources are currently being conserved to some degree and are accessible to the public.

By linking related resources through the themes identified in Chapter 4, these resources can be interpreted in terms of larger historical, ecological, and geographical contexts that will better highlight their meaning and significance. A National Heritage Area designation will also provide opportunities to increase the number of resources that are preserved, restored, and interpreted in the region. By expanding the assemblage of resources with high levels of integrity, the stories of the Santa Cruz Valley can be told even more powerfully through the themes identified in this Feasibility Study.

(6) Residents, business interests, nonprofit organizations, and governments within the proposed area are involved in the planning, have developed a conceptual financial plan that outlines the roles for all participants including the federal government, and have demonstrated support for designation of the area.

Chapter 1 of this Feasibility Study summarizes the history of the local effort seeking a National Heritage Area designation, including the diversity of interest groups who participated in the working group that developed the National Heritage Area concept described in Chapter 2. While there were between 10 and 25 participants at each of the monthly meetings held since April 2003, the working group consisted of about 50 persons, in aggregate, over time. Represented in this planning group were interested residents of the region, local farmers and ranchers, nonprofit organizations dedicated to heritage and nature conservation, groups and agencies involved in community development and economic development, organizations working to promote the region for tourism, local resorts and small businesses that benefit from tourism, state park units, and local governments. Advising this group were the superintendents of two National Parks within the proposed National Heritage Area, with Tumacácori National Historical Park in the role of primary National Park Service partner. The participants in the working group are listed in Appendix D.

Interests Represented in the Working Group for Planning the Proposed National Heritage Area

- ◆ Local governments
- ◆ Local state park units

- ◆ Historic preservation
- ◆ History education
- ◆ Nature conservation
- ◆ Environmental education
- ◆ Tourism
- ◆ Resorts
- ◆ Small businesses
- ◆ Agriculture
- ◆ Ranching
- ◆ Housing development
- ◆ Economic development
- ◆ Community development.



Adriell Heisey

As can be seen from the list above, a broad range of interests in the public and private sectors have been involved in the planning of the proposed National Heritage Area. The management entity will have a Partnership Council that will include a representative cross section of stakeholders who will be involved in developing the Management Plan following designation (see Chapter 6). Through rotating seats on the Board of Directors and the Partnership Council, the management entity will provide opportunities for participation by interested organizations wishing to become involved in planning and programming for the National Heritage Area.

The group of stakeholders in the working group also helped develop the conceptual financial plan presented in Chapter 7 that outlines the roles for all participants, including the National Park Service. The plan includes an assessment of possible local funding sources; an estimate of the amount of Congressional funding needed in the first year; ideas for building a base of earned income; a strategy for obtaining donations, endowments, and grants; revenue projections; an operating budget for the first year of operations; and recommendations for achieving economic independence and sustainability.

The breadth of local support for the National Heritage Area designation is demonstrated by the variety of interest groups involved in the planning (see Appendix D), by the range of public and private funding sources for this Feasibility Study and related public outreach (see Chapter 1), and by the numerous resolutions and letters of support presented in Appendix E. The vision of this National Heritage Area has brought together a remarkably diverse group of local stakeholders interested in recognizing, preserving, interpreting, and promoting the heritage resources, cultural traditions, and natural beauty of this region.

(7) The proposed management entity and units of government supporting the designation are willing to commit to working in partnership to develop the heritage area.

Several units of government have been directly involved in the planning and funding of this effort seeking a National Heritage Area designation. The commitments of state agencies, local governments, and tribes to partner with the management entity are reflected by their resolutions and letters of support, by their participations in the planning process, and by their financial contributions toward preparation of this Feasibility Study. Representatives of local governments and tribes have provided input to this Feasibility Study, including Chapter 6, which outlines the roles of all parties. Local governments and tribes will also provide inputs

to the Management Plan when it is prepared after designation. To ensure that governmental interests are represented in the planning and programs of the National Heritage Area, the proposed management entity will include representatives of state and local governments and tribes on its Board of Directors, and on an advisory Partnership Council. Local units of the National Park Service, the National Forest Service, and the Bureau of Land Management will serve in advisory roles.

(8) The proposal is consistent with continued economic activity in the area.

Creation of a National Heritage Area will not adversely affect current economic activity because designation will not bring any changes in private property rights, land-use zoning, or property taxes. Based on the performances of 24 studied National Heritage Areas, designation is expected to stimulate the economy of the region in several ways. Increased heritage tourism and nature tourism will have positive impacts on local business revenues, tax revenues for local governments, and job creation. If this new National Heritage Area can match the average performance of existing areas, the total economic impacts of tourism will approximately double within 10 years of designation. This would add some \$1.8 billion into the local economy and create 40,000 new jobs related to tourism. New types of jobs will also be created in the areas of historic preservation, nature conservation, resource interpretation, community development, and regional planning.

With a National Heritage Area in place, there will be additional support for public and private partnerships for preservation, as well as an increase in related investment opportunities. Rehabilitation of historic buildings will create new housing and help revive downtown. All of these activities will support an industry related to rehabilitation materials and construction. The National Heritage Area will provide tax credit education and assistance for owners of historic properties. A Santa Cruz Valley National Heritage Area will also improve the quality of life in the region. In sum, voluntary, community-based preservation supported by a National Heritage Area designation is anticipated to lead to sustainable economic and community development.

Anticipated Economic Effects of an National Heritage Area Designation

- ◆ Increases in business and tax revenues from growth in heritage tourism and nature tourism
- ◆ Job creation, including opening of new job sectors
- ◆ Increased investment opportunities related to historic preservation
- ◆ Housing creation through rehabilitation of historic buildings
- ◆ Economic revitalization of historic downtowns
- ◆ Incubation of an industry in rehabilitation construction and materials
- ◆ Education and assistance for federal and state historic rehabilitation tax credits.

(9) A conceptual boundary map is supported by the public.

The conceptual boundaries of the proposed National Heritage Area, as described in Chapter 2, are not for regulatory purposes, but rather, mark an area for regional planning, preservation, interpretation and promotion of heritage, nature, open-space, and outdoor-recreation resources on a voluntary basis. Alternative boundaries were considered at the beginning of the National Heritage Area designation effort. The boundaries proposed in this Feasibility Study were selected for three reasons:

- ◆ To the extent possible, the conceptual boundaries follow the natural boundaries of the upper and middle watershed of the Santa Cruz River, creating an effective area for resource conservation planning and management.
- ◆ The conceptual boundaries enclose sufficient resources with the integrity necessary to support the proposed interpretive themes.
- ◆ The conceptual boundaries include a sufficient number and diversity of resources to provide representative experiences to residents and visitors.

Large color maps depicting the conceptual boundaries have been displayed at every stakeholder meeting and public presentation (see lists of meetings and presentations in Chapter 1). Support has been uniformly favorable, and there is consensus among local stakeholders that these will be appropriate and effective boundaries for a Santa Cruz Valley National Heritage Area.

(10) The management entity proposed to plan and implement the project is described.

Chapter 6 of this Feasibility Study describes the organizational structure of the proposed management entity for this National Heritage Area. Following designation, this management entity will be responsible for: (1) developing the Management Plan; (2) negotiating 5-year cooperative agreements and annual amendments with its National Park Service Partner; (3) developing committees and other mechanisms to assess stakeholder opinions and incorporate that information into prioritized plans; (4) selecting projects and programs to support through local and federal funding; (5) administering annual federal appropriations; and (6) fundraising from local sources. Including a Board of Directors and a Partnership Council, it is designed to meet several criteria.

- ◆ The singular role is planning and management of the National Heritage Area.
- ◆ A wide variety of local interest groups are represented.
- ◆ Its members have experience in, and commitment to, preservation of nature and heritage resources and education about their significance and values.

- ◆ It has the support of the public and local governments, tribes, and organizations that wish to participate in the activities of the National Heritage Area.
- ◆ It has the capability to obtain local funding to match federal contributions for a 10-year period, and then to achieve self-sustainability.

The roles and structure of this management entity are expected to evolve during preparation of the Management Plan and implementation of its first projects and programs, as its needs, goals, and capabilities are defined over time. The primary financial goals of this management entity are to create new public/private funding partnerships, to efficiently use federal match funding to leverage local contributions and to help implement programs, and to achieve self-sustainability within 10 years of designation.

Chapter 9

CONCEPTUAL ALTERNATIVES

Evaluation of the proposed Santa Cruz Valley National Heritage Area can benefit from a comparison with other alternatives. Three are considered here. First, the option of continuing with no special action is outlined. Second, the National Heritage Area alternative is described. Third, the possibility of taking action via a nongovernmental approach, such as self-designation as a heritage area or creation of a non-federal program, is considered.

ALTERNATIVE 1: CONTINUE EXISTING ACTIVITIES

Numerous programs and activities related to the cultural and natural resources of this southern portion of the Santa Cruz River watershed are already in place. Most, if not all, would continue for the foreseeable future whether or not a National Heritage Area is established.

At the federal level, Tumacácori National Historical Park is the centerpiece cultural resource program, and its land base and interpretive programs are currently being expanded. Saguaro National Park is steward to impressive stands of saguaro cacti and Sonoran Desert habitat. Coronado National Forest provides substantial recreational access to areas where both natural and cultural resources can be appreciated. The National Park Service is also developing local partnerships to establish the Juan Bautista de Anza National Historic Trail along a portion of the Santa Cruz River in the study area.

State programs are led by four state parks. The Tubac Presidio State Historic Park provides a strong complement to the Spanish-mission history theme of the National Park Service, with its focus on Spanish and Mexican period military history. Catalina State Park offers a mix of natural and cultural resources, the latter covering both prehistory and the 1850-1900 period during historic times. San Rafael State Park is in relatively early stages of developing interpretation of both ranching and natural resources in the sparsely populated upper Santa Cruz Valley. Patagonia Lake State Park is developing a visitor center to interpret the biological importance of the downstream Sonoita Creek State Natural Area.

Municipalities also have several strong programs that are underway or are being planned. The City of Tucson's Rio Nuevo Project will feature the Tucson Origins Heritage Park that will reconstruct and interpret 4,000 years of Native American history; Spanish and Mexican period mission, military, and civilian history; and the early Territorial period history of the Tucson area, with a focus on the role of the Santa Cruz River. The Pima County program, El Paseo de las Iglesias, will focus on the history and prehistory of the area between the San Xavier District of the Tohono O'odham Nation and the A-Mountain area in downtown Tucson. Pima County is also developing a major interpretive program related to ranching at Canoa Ranch. At the northern end of the study area, the Town of Marana is developing plans for interpreting the long agricultural history of the Santa Cruz Valley. Oro Valley is working to preserve and conduct an adaptive reuse at the Steam Pump Ranch along the Cañada del Oro drainage.

The private sector is also involved in many activities within the study area. The Nature Conservancy has several preserves, landholdings, and conservation easements – the Patagonia-Sonoita Creek Preserve being the largest one that is open to public visitation. It features the natural resources of the Sonoita Creek riparian area, and it contains the remains of an early Spanish mission. The Audubon Society also has several small preserves along the Santa Cruz, and the Empire Ranch Foundation is restoring nineteenth century ranch buildings and developing an interpretive trail through the ranch. Private organizations work in many ways as partners with programs of various government agencies.

Within the study area, numerous individual projects have received funding from a variety of government and private sources. For example, grants have been received from the Arizona Heritage Fund, the federal Land and Water Conservation Fund, and from federal transportation enhancement programs.

All of these major programs and activities will likely continue without creation of a National Heritage Area. Other projects and programs of smaller scale will also likely continue, or will be developed. These activities will probably continue to have a project-specific focus rather than be tied to an integrated, regional program the National Heritage Area would promote. Continuing with the current approach to nature and cultural resource interpretation and promotion is likely to miss opportunities for synergy among the many ongoing activities. New opportunities are also likely to be missed.

ALTERNATIVE 2: CREATE THE SANTA CRUZ VALLEY NATIONAL HERITAGE AREA

Creation of a new National Heritage Area would build upon all of the key current programs and activities outlined under Alternative 1. Several key new elements would also be expected.

The creation of a local management entity would serve to coordinate integrated planning on a regional scale. Because a heritage area includes such a diversity of stakeholders, a special-purpose organization (as described in Chapter 6) is viewed as the most effective framework within which to coordinate partnerships and planning among various levels of government and many kinds of private-sector involvement.

Under a new National Heritage Area, the local management entity would have access to technical assistance from the National Park Service. Further, the management entity would allocate funds to achieve the goals identified through the regional planning process. Such funds would provide the basis for building productive new partnerships, especially with the private sector.

The status associated with federal recognition and promotion of the Santa Cruz Valley National Heritage Area will be an important element in attracting potential tourists. Establishing this as a destination resource for regional-level tourism is a necessary outcome, and one that is greatly facilitated by the federal recognition process.

The cumulative effect of the creation of a new National Heritage Area is that substantially enriched programs for interpreting and experiencing natural and cultural resources will be

developed. The effort invested in the integrated promotion of the National Heritage Area also improves the likelihood of significantly greater economic development being an outcome.

ALTERNATIVE 3: CREATE A PRIVATE-SECTOR, SELF-DESIGNATED HERITAGE AREA

Cape Cod successfully pursued a nonfederal concept similar to what could be accomplished through creation of the Santa Cruz Valley National Heritage Area. The Cape Cod area had three characteristics or resources that do not appear to be readily available in the Santa Cruz Valley, however. First, there was already a strong sense of local identity within the Cape Cod area that was also broadly known outside the region. Second, an existing organization, Heritage Cape Cod, was already in place and was able to step immediately into a leadership role in implementing the program. Third, there was a strong source of funding through two agencies that have largely underwritten Heritage Cape Cod.

The grassroots nature of, and broad support received by, the present effort to develop a National Heritage Area shows there is potential for success with a nongovernmental approach in the Santa Cruz Valley. Selection of this local option would avoid the need to invest the time required to gain federal recognition. However, the lack of the three essential ingredients identified above for the Cape Cod case will be difficult to overcome.

Existing institutions that have participated in the process of creating a Santa Cruz Valley National Heritage Area all have missions that are compatible with the National Heritage Area. However, their missions are much more general and extend well beyond the geographic area envisioned by this National Heritage Area proposal. Therefore, a new institution would be needed. Further, there are no apparent sources of local funding that would support such a new organization or the heritage area itself. It is possible that the State of Arizona will develop a program of State Heritage Areas in the future, but that concept is only in the discussion stages. It is unknown if such a state-level program would include funding.

The absence of the status that federal recognition brings is also a hindrance to this local option. Finally, the absence of federal heritage area funding makes the development of cost-sharing partnerships much more difficult.

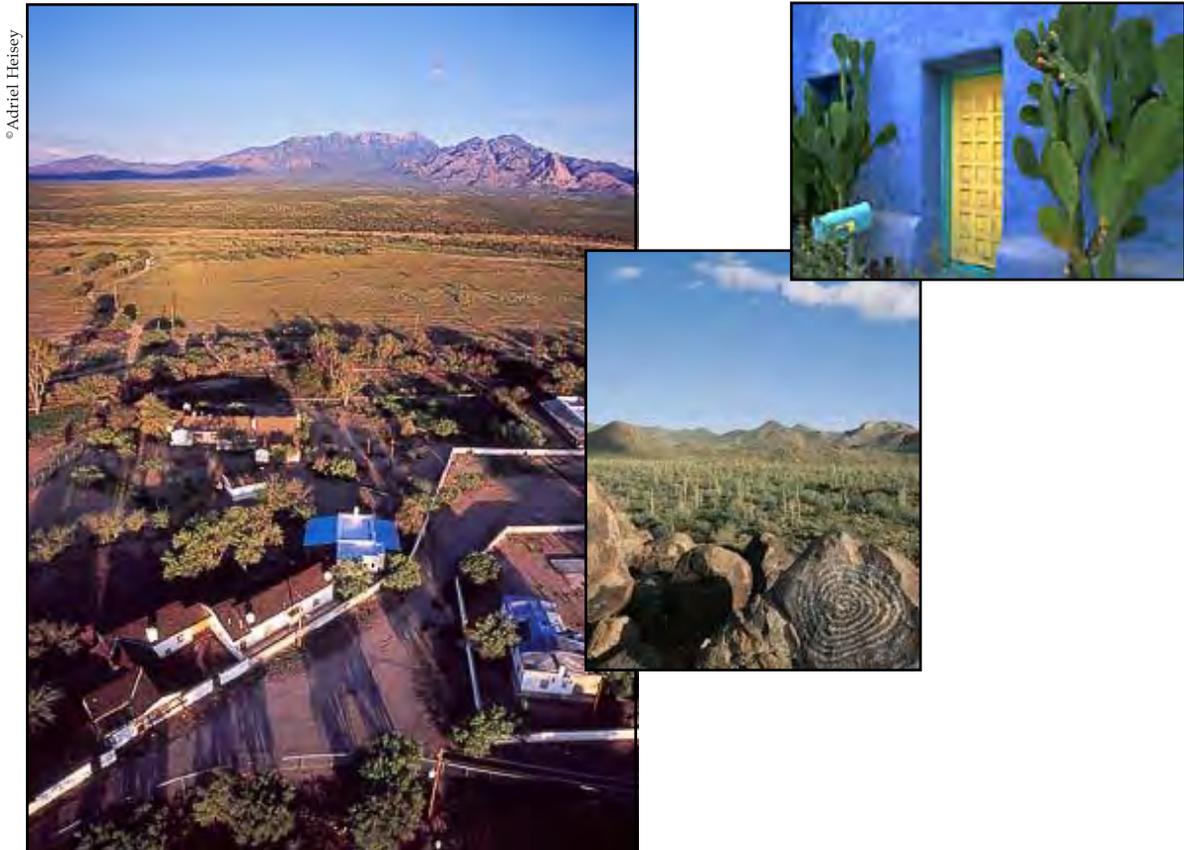
EVALUATION

Initial stimuli for exploring the National Heritage Area concept included awareness that this region is rich in natural and cultural resources and appreciation that many activities and programs already exist. There was also awareness that there were opportunities to do even more. Therefore, the status quo in this region is full of positives, although there is a significant recognition that much more is possible and a growing consensus that much more should be expected.

The National Heritage Area is a blend of private-public collaboration that invests control at the local level for establishing priorities and allocating federal monies. It benefits from the positive prestige of federal recognition.

A local, private alternative to creating a new National Heritage Area is not impossible. It would lack the prestige and financial support that would come with federal recognition. It would depend on a new local organization that would be challenged at the outset simply to ensure its own existence. Consequently, it seems unlikely that a local, nongovernmental approach would advance common goals more rapidly. In fact, it may be significantly less capable of doing so.

In conclusion, establishing a new National Heritage Area represents the best way to optimize the likelihood for success in creating a regionally integrated approach to nature and cultural tourism. Such regional integration and promotion are essential for achieving significant economic gains for the region.



VISION STATEMENT

The Santa Cruz Valley is a fascinating area of our nation where long-term relationships between people and nature have produced a landscape with high ecological, cultural, and aesthetic values. Here, rich biological diversity coincides with cultural diversity in a way that helps define the character of our nation. Valley residents have always appreciated the unique natural beauty of their region. Now, there is also a growing awareness of the values of local cultural traditions, vernacular architecture, and working landscapes, as well as an increasing recognition of sustainable land uses that have been practiced for centuries. However, the pressure of a rapidly growing population is creating a need to strengthen local communities and successfully plan for the environmental, cultural, and economic future of this region. This Feasibility Study shows how a National Heritage Area designation will help residents of the Santa Cruz Valley manage change by preserving a sense of place.

As in other parts of the country, a broad spectrum of local stakeholders have coalesced around the National Heritage Area concept because it represents a significant shift from the traditional national park model with regulatory boundaries, top-down management, and objectives centered on mandatory resource protection and interpretation in limited areas. In contrast, the National Heritage Area concept is based on large landscapes with multiple owners and management entities, and objectives centered on communities, voluntary resource conservation, and interpretation of related resources in larger contexts. The concept is built on the principle that conservation efforts cannot be successful without the participation and leadership of those people closest to the resources. It is an approach to resource management based on decision-making at a local level, with the people living here setting the agenda and implementing it themselves. Rather than relying on regulation, heritage education and environmental education are used to build a stewardship ethic, and conservation is voluntary.

Many advantages to a National Heritage Area approach are apparent. It is an opportunity to make conservation more inclusive by broadening the participation of different kinds of people. It provides a way to link related resources and coordinate conservation efforts over a large area. It helps build bridges between diverse local organizations where none existed before, and it also provides a framework within which privately and publicly owned resources can be managed together through voluntary partnerships. It provides a mechanism to combine public and private funding to increase effectiveness toward local goals.

A National Heritage Area is a way for community-based, voluntary conservation to integrate with sustainable economic land uses and community development. National Heritage Areas are compatible with economic activity because they recognize the importance of private lands; they further recognize that property owners are the primary planners of land use. The proven effectiveness of National Heritage Areas as a conservation approach derives from their providing funding and other assistance, not regulations and red tape, to help communities and private landowners achieve their own stewardship goals. Their effectiveness as an economic development strategy is demonstrated by the significant increases in heritage tourism and nature tourism in existing National Heritage Areas, and related increases in jobs, business incomes, and tax revenues. Rehabilitation of historic buildings supported by grants and loans



Principles of National Heritage Areas

- ◆ *Voluntary participation*
- ◆ *Created by grass-roots, broad coalitions*
- ◆ *Recognize values of distinctive landscapes and cultural traditions*
- ◆ *Economic development based on heritage and nature tourism*
- ◆ *Security of property rights*
- ◆ *Partnerships to achieve shared goals*
- ◆ *Assist stakeholders to achieve their own goals*
- ◆ *Local management by stakeholder representatives*

from a National Heritage Area, in combination with federal and state tax credits, will create new housing, help revive historic neighborhoods and downtowns, stimulate growth of a rehabilitation industry, and open up new investment opportunities. Conservation and restoration of important natural areas will improve the quality of life in the region.

In summary, the concept of a Santa Cruz Valley National Heritage Area envisions preservation-based community development that protects important resources, promotes a sense of place, and provides new economic opportunities. The concept recognizes that preservation efforts cannot be successful without the participation and leadership of those people closest to the resources, and it encourages the stewardship roles of local communities and private landowners. It is an approach to resource management based on decision-making at a local level, with residents of the region setting the agenda and implementing it themselves. Most importantly, it provides a way for the people who live here to create a future that includes the cultural traditions, historic places, working landscapes, and natural treasures that make this region unique and special.

Appendix A

DESCRIPTIONS OF IMPORTANT HISTORIC SITES

This list of some of the most important historic sites or properties (buildings, structures, and districts), within the proposed Santa Cruz Valley National Heritage Area includes: (1) all National Historic Landmarks; (2) selected properties currently listed on the National and State Registers of Historic Places; (3) selected properties that are unlisted but are likely eligible for inclusion in the National and State Registers; and (4) selected properties with local significance. The properties in Pima County were identified in 2002 as Priority Historic Sites for the cultural resources element of the Sonoran Desert Conservation Plan (Pima County 2002). The properties in Santa Cruz County were identified in a 2004 inventory conducted for this Feasibility Study by the University of Arizona Preservation Studies Program. This combined list does not include every property currently listed on the National and State Registers. It is a small sample of the historic properties with national, state, and local significance in this region, and it can be expanded in the future.

10 COTTAGES ON SHORT STREET, NRHP

Short Street

Nogales

(Early 1900s) These 10 concrete cottages were built as modest worker's housing early in the twentieth century. They are significant to the Nogales area because they are the only examples of cast-in-place concrete construction in the residential sector. They are uniquely situated on a hillside, with a central stairway access servicing the units. The cottages feature exposed rafters and corrugated steel sheathed gabled roofs. (Andrew Gorski)

1ST UNITED METHODIST CHURCH

915 East Fourth Street

Tucson

(1929, T. M. Sundt; sanctuary edition, 1977, by Nicholas Sakellar, FAIA) The use of colorfully glazed tiles, wrought iron, and the exposed wooden rafter ends are characteristic of the Spanish Colonial Revival, as is the traditional courtyard and bell tower. The height and complex design of the belltower have made the church a landmark. (Nequette and Jeffery 2002)

Notes:

- (1) Edited contributions by individuals are attributed by their full name; written source materials from publications are attributed by author(s) last name and publication date.
- (2) NRHP indicates the property is listed on the National and State Registers of Historic Places. If the property contributes to a National Register District, the name of the district is enclosed in parentheses.
- (3) NHL indicates the property is listed as a National Historical Landmark.
- (4) NHP indicates the property is part of a National Historic Park.
- (5) Property descriptions and addresses: Dates in parentheses refer to the actual or approximate construction of the property structure(s), to the earliest known date of the establishment of a community/district, or to the earliest known date of the founding/homesteading of a ranch property.

3RD STREET STREETSCAPE, NRHP

Sam Hughes

Tucson

(Campbell Avenue to Country Club Road) By far the most appealing street in the neighborhood, it is best experienced by bicycle as one travels from Campbell to Country Club, and it has features to calm automobile traffic. Moving from west to east will evoke a sense of decade-by-decade time travel; from a street lined with palms and citrus trees forming a rhythmic edge and foreground for a dense fabric of revival houses, to more widely spaced trees standing guard in front of bungalow or deco houses. (Nequette and Jeffery 2002)

4TH AVENUE TROLLEY LINE

4th Avenue

Tucson

The Old Pueblo Trolley operates on what is left of Tucson's trolley system on 4th Avenue; it operates on weekends. Tucson had an electric streetcar system that was established before 1900, as a horse-drawn street railway, and it was electrified in 1906. The electric streetcars, commonly known as trolleys, operated until 31 December 1930, when they were replaced by motor buses. (Marty McCune)

4TH AVENUE UNDERPASS, NRHP

4th Avenue

Tucson

Completed in 1916, this was Arizona's first underpass. Excavation was done by hand while trains rumbled overhead. This is a good early example of concrete construction. (Tucson Pima County Historical Commission)

4TH AVENUE STREETSCAPE

Fourth Avenue between 9th Street and 2nd Street

Tucson

One of the most lively pedestrian environments in Tucson, the 4th Avenue streetscape is a combination of a comfortable scale and a variety of shops and restaurants with more recent amenities such as the restoration of the electric trolley with stops, crosswalks, benches, shade trees, and artwork. The architectural styles range from variations on a Mission theme (including the Salvation Army's sidewalk arcade), to the patios at Caruso's and the curvilinear Art Deco facade at 721 North 4th Avenue. (Brooks Jeffery)

ADKINS PROPERTY, NRHP
Fort Lowell
Fort Lowell Road and Craycroft Road
Tucson

The Adkins property at the corner of Fort Lowell Road and Craycroft Road contains remnants of Fort Lowell, built in 1873, as an Army outpost to protect Tucson from attack by the Apache Indians. The property of 5.1 acres contains one intact officers quarters and extensive ruins of two other officers quarters and their kitchen buildings. Also on the property is the location of four headquarters structures, now archaeological features. (David Faust)

AGRICULTURE (FORBES) BUILDING, NRHP
University of Arizona
Tucson

(1915, Bristow & Lyman) The most popular style of the period for campus architecture, the Classical Revival utilized eight Ionic columns for the portico, a low-hipped tile roof, and Classical ornament at doors and windows. The U-shaped plan, open to the east, provides one of the best courtyards on campus. (Nequette and Jeffery 2002)

AGUA CALIENTE RANCH
East Roger Road, East of Soldier's Trail
Tucson

A respite for city dwellers from 1878 to the 1950s, the ranch is currently being restored through grant funding and public support. The ranch is surrounded by a lush oasis of spring-fed ponds, cottonwoods, fan palms, and lawns, which could only be supported with an unusual abundance of water. The existing buildings to be renovated include the ranch headquarters, a bunkhouse, and a cottage. (Nequette and Jeffery 2002)

AGUA LINDA RANCH (FARM)
2643 East Frontage Road
Amado

(Late eighteenth century) This 63-acre farm is located on part of the historic "Baca Float," one of Arizona's original land grants. Torevio (Toribio) De Otero, recipient of the first Spanish land grant in the Arizona territory (Pimería Alta), founded the ranch in the late 1700s. Otero equipped his ranch with brush dams and irrigation ditches carrying water from the Santa Cruz. The Agua Linda Ranch property was part of the huge Otero cattle empire until 1941. In 1949, the Baboquivari Cattle Company purchased the property, and it was managed by Carlos Ronstadt. Renowned architect Josias Joesler designed the original ranch house, which dates to around 1950. Today, the Agua Linda Farm grows and sells produce, and rents its facilities for special events. (Linnéa Caproni)

ALTO GHOST MINING TOWN

Sonoita

(Post-1854) This abandoned mining community developed around the Alto mine, which dates back to seventeenth century Spanish Jesuit occupation. After the Gadsden Purchase, the Alto mine was re-worked by Americans, and its gold provided the mainstay for the Alto community. Between 1907 and 1933, Alto had a post office housed in the former adobe house of mining engineer and poet, Josiah Bond. Alto also laid claim to one of the approximately two dozen “Little Red School Houses” constructed in the Santa Cruz Valley during the 1920s. Present-day remains include part of the post office, building foundations, and a cemetery. (Linnéa Caproni)

ARIZONA DAILY STAR BUILDING

30-32 North Church Avenue

Tucson

The *Arizona Daily Star* was the first daily paper to serve Tucson (started in 1877). The paper was started by L. C. Hughes and Charles H. Tully. This building was the paper’s headquarters from 1884-1917, although it has changed considerably over the years. (Tucson Pima County Historical Commission)

ARIZONA INN, NRHP

2200 East Elm Street

Tucson

(1930, Merritt Starkweather, FAIA, architect, and Isabella Greenway, owner) This complex of buildings, cottages, and open spaces has become a model for garden resort hotels. Similar to traditional Mediterranean complexes, the layout of one- and two-story building forms of pitched and flat roofs creates a protective perimeter from the current suburban neighborhood and focuses attention on the interior courtyards, gardens, and hotel guests—similar to a secluded village. (Nequette and Jeffery 2002)

ARIZONA-SONORA MANUFACTURING COMPANY MACHINE SHOP (HOUSE),

NRHP

Grand Avenue

Nogales

(1901, Roy & Titcomb, Inc.) Constructed in 1901, the Arizona-Sonora Manufacturing Company Machine Shop is the oldest industrial building in Nogales. It is the only structure remaining that was associated with the firm of Roy & Titcomb, Inc., majority owners of the Arizona and Sonora Manufacturing Company and largest employers in Nogales between 1900-1920. Consisting of a fired brick exterior over a brick, steel truss and iron post structural system, the Mission Revival design includes a gabled roof with parapets and a rounded pediment at the gable walls. (Andrew Gorski)

ATASCOSA LOOKOUT HOUSE, NRHP
Coronado National Forest

(1930s) Located in the Coronado National Forest, Nogales Ranger District, Atascosa Lookout House was erected by the Forest Service in 1930 or 1933. A wooden house placed on the ground and measuring 14 ft², Atascosa Lookout House was constructed as an observation viewpoint for the detection of forest fires. Associated with its development were an outhouse and stone cistern. Accessible by hiking trail only, Atascosa Lookout House is now used as a rest area by hikers. (Andrew Gorski)

BARRIO DE TUBAC ARCHAEOLOGICAL DISTRICT, NRHP
Tubac

The 10-acre Barrio de Tubac Archaeological District includes 33 Spanish Colonial residence foundations, a plaza area, a refuse area, a partial irrigation ditch, a historical pedestrian and equestrian trail, and four foundation structures from the Tubac townsite period of 1876-1920. The district is significant for its cultural affiliation with the O'odham, Hispanic, and Anglo groups, as well as for its representation of Tubac's development from a Spanish colony to an American Southwest settlement. It has the potential to yield additional information and therefore was listed on the NRHP at the state level, under Criterion D. (Linnéa Caproni)

BAYLESS HOUSE, NRHP
West University
145 East University Boulevard
Tucson

(1905, Trost & Rust) An unusual design, in that the entry to this symmetrical house is perpendicular to the dominant gabled roof, causing the two curvilinear Mission style pediments to form a bracket, or bookends, on the sides of the house. A full basement constructed of malpais and brick contains five rooms that were used as summer living quarters for the family before air conditioning. (Nequette and Jeffery 2002)

BEAR DOWN GYM, NRHP
University of Arizona
East 4th Street
Tucson

(1926, Lyman & Place/Roy Place, architect; Clinton Campbell, builder) Built to accommodate a larger student population, this classically symmetrical brick exterior, with its large barrel vault, suggests a brick structure. However, there is actually an internal steel structural system, including the joists supporting the gym floor, and internally exposed steel bow trusses for the roof. The semicircular arched entry is framed with a glazed terra cotta tile in a very delicate bas relief pattern. (Nequette and Jeffery 2002)

BENEDICTINE SANCTUARY
800 North Country Club
Tucson

(1939-1940, Place & Place/Roy Place) This Spanish Colonial Revival structure includes the private functions typical of a monastery – church, cloister, dormitories, and refectory. One of the last buildings designed by Roy Place before his firm began designing in the Modern style, the revivalist vocabulary of arches, clay tile roofs, and tower are consistent with many of Place’s previous buildings, and it conveys a timeless quality. (Nequette and Jeffery 2002)

BINGHAMPTON RURAL LANDSCAPE
Rillito River
Campbell Road to Dodge Boulevard
Tucson

For many years, the river bend area of approximately 400 acres has been part of the scenic qualities associated with River Road, and the area is a community with a long agricultural tradition. Apparently settled and used in prehistoric times by the Hohokam, this area was established as a pioneer Mormon settlement about 1900. Family patriarch Nephi Bingham is generally credited with its founding and the source of its name. Binghampton is also the name for the urban area south of the Rillito River at Dodge Boulevard and Fort Lowell Road, and together, both the rural farm community and the more urban subdivision south of the river formed the greater Binghampton area. The area is designated as a National Rural Historic Landscape. (Linda Mayro)

BLENMAN HOUSE (ROYAL ELIZABETH BED & BREAKFAST), NRHP
Armory Park
204 South Scott Avenue
Tucson

(1878) Recently renovated as the Royal Elizabeth Bed & Breakfast, this Late Transitional style adobe house sits on a stone foundation and features an added porch and pitched roof. The central hall, or zaguan, has leaded glass skylights, probably dating from the 1890s. (Nequette and Jeffery 2002)

BOUDREAUX-ROBINSON HOUSE (COPPER BELL BED & BREAKFAST), NRHP
101 North Bella Vista Drive
Tucson

(circa 1910, addition 1927; Leon Boudreaux, owner/builder; Mr. Kurtz, stonemason; addition by Manuel Miranda, stonemason) Whereas the original deep purple malpais of the first floor came from the A-Mountain quarry, some of the newer stone that was used for a horizontal band that marks the transition to the second floor is reddish in color. The masonry features irregular stones and joint lines, and the hipped roof is covered with Spanish tile. A bold arched entryway wraps around to the south, which was originally a portre cohere (now a patio). (Nequette and Jeffery 2002)

BOWMAN HOTEL, NRHP
245 Grand Avenue
Nogales

The Bowman Hotel is the oldest remaining hotel building in Nogales. It is associated with Wirt G. Bowman, a prominent early Nogales businessman and a state and national politician. It is an exemplar of early twentieth century commercial architecture and features a locally unique decorative art stone cornice. The exterior is in poor condition. (Andrew Gorski)

BOWMAN, W. G. HOUSE, NRHP
613 Sierra
Nogales

Located in the residential development of Calvary Hill, a subdivision of Ellis Ranch, the W. G. Bowman House was built for one of Nogales' most influential and prolific real estate holders and businessmen during the height of his local career. Wirt G. Bowman was also a prominent state and national political figure. Prominently sited, the Bowman House is constructed of concrete and is the best local example of Neo-Classical Revival residential architecture. Its hipped roof, with intersecting pedimented gables, is covered with Spanish tile and includes a denticulated cornice and medallions in the frieze above the porches. (Andrew Gorski)

BRADY COURT BUNGALOWS (ARIZONA THEATER COMPANY), NRHP
Armory Park
40 East 14th Street
Tucson

(1915; renovation 1976, by Collaborative Design Group/Frank Mascia) Typical of California bungalow court apartments, three symmetrical duplex units form a tight courtyard open on the street side. The buildings sit on a raised foundation of dark volcanic stone, with concrete slab porches composed of tapered piers and wood rafters of composite construction and shaped ends. A very rough concrete stucco has been added to the exterior, and the wood is badly deteriorated. The original craftsman woodwork in the wainscoting, picture molding, and doors is all intact. (Nequette and Jeffery 2002)

BRAY HOUSE, NRHP
Menlo Park
203 North Grande Avenue
Tucson

(William Bray, architect, 1917) When built, this Prairie style house, reminiscent of Wright's Unity Temple, was the most elaborate residence on the most prominent street in the neighborhood. The double-width walls of imported buff-colored bricks form cubic volumes, and around these volumes runs a strong horizontal-projecting band of wood at the roofline below the top of the parapet. The ornamental stonework in the exterior brackets, interior fireplace caryatids, and urns were designed by Bray. (Nequette and Jeffery 2002)

BROADWAY VILLAGE

**Broadway Boulevard and Country Club Road
Tucson**

(1939, Josias Joesler) This eclectic Spanish Colonial Revival shopping center was intentionally designed as a set of distinct building elements around a plaza space meant to evoke a miniature village. The relegation of parking to the back of the property in an age of retail strips and street parking enhances the pedestrian experience as the building forms, plaza space, and hand painted decorative tile are easily accessible. (Nequette and Jeffery 2002)

BROWN HOUSE/OLD ADOBE PATIO, NRHP

**40 West Broadway Boulevard
Tucson**

(circa 1840) This existing adobe structure was actually two houses. The Jackson Street house is older, and was remodeled by Charles O. Brown in 1868, with a new coat of stucco sporting quoins at the corners. The house that faces Broadway is connected by a series of adobe rooms to the west and is newer and more American in its expression, with its sloping porch roof supported by wooden columns and brackets. (Nequette and Jeffery 2002)

BURTON BUILDING (ED BURTON & SON BUILDING), NRHP

**253 Grand Avenue
Nogales**

The Burton Building is one of three remaining hotel buildings built in Nogales by prominent contractor, Edward Burton. The hotel played an important part in the commercial development of Grand Avenue. It is the only example in Nogales of a commercial building constructed of concrete bricks. As an important resource along Grand Avenue, it should be a priority to receive historic restoration. (Andrew Gorski)

CADY HALL, NRHP

**346 Duquesne Avenue
Patagonia**

(1900, Henry O. Jaastad) This building played a role in the development of the town of Patagonia, which flourished with the railroad, mining, and cattle ranching. John Cady, who wrote his memoirs, *Arizona's Yesterday*, owned it. In its restaurant, saloon, and meeting hall, the hotel accommodated many social and civic events. It represents the evolution of hotels and public buildings in Patagonia. Architect Henry O. Jaastad designed the hotel, and it represents the Colonial Revival architecture constructed with adobe, which continued to be used in the city. The hotel maintains its integrity despite the few alterations that have been done. (Andrew Gorski)

CAMPBELL AVENUE FARM
4101 North Campbell Road
Tucson

(University of Arizona Campus Agricultural Center) The 1910 residence/workman's cottage is the earliest known extant poured concrete residence in Tucson. The unattributed 1914 machinery shed set the precedent for use of the Mission Revival style in subsequent buildings, characterized by the sculpted and semicircular gable parapet, white stucco walls, and corrugated tin roofs. The 1917 octagonal water tower remains one of the few remaining disguised water towers in Tucson. (Nequette and Jeffery 2002)

CAMP LITTLE COTTAGES AND HISTORICAL MARKER
Along Western Avenue-Boundary
Nogales

(1915) These cottages represent Nogales' military post, Camp Little, and are architectural examples of the camp's military housing. Camp Little was located along what is now Western Avenue from Grand Avenue to Interstate 19. In 1910, following the outbreak of the Mexican Revolution, large numbers of troops were called in to Nogales. Their numbers increased and eventually contributed to the establishment of Camp Little, whose name was derived from that of a private in the 12th U.S. Infantry Division, Camp Stephen D. Little. Little was killed while on guard duty at the top of the hill on Crawford Street in November of 1915. At one time, Camp Little had 12,000 troops stationed, but over the years, that number decreased and led to the closure of the camp on 13 May 1933. A historical marker nearby on the lawn of the Nogales City Hall is currently the only interpretative site associated with Camp Little. (Linnéa Caproni; Andrew Gorski)

CANELO RANGER STATION, NRHP
Forest Road 52B N of Canelo, Coronado National Forest
Canelo

(1932-35) Canelo Ranger Station is a U.S. Forest Service administrative site, with five buildings built between 1932 and 1935. The ranger station office is a one-story, bungalow-style rectangular building that follows a standard Forest Service plan. Other structures completed during this Depression-era project include a garage, small barn, residence, and pump house. All five buildings are constructed of stucco-covered adobe brick. Rubble stone retaining walls and stone paths, all constructed by the Civilian Conservation Corps, help to place the buildings into this gently sloping and highly vegetated site. (Andrew Gorski)

CANELO SCHOOL, NRHP
State Route 93, 18 miles southeast of Sonoita
Canelo

(1913) Serving a small rural ranching community between the years of 1913 and 1948, the Canille or Canelo School is one of the best-preserved, one-room schoolhouses in Arizona. Measuring 42 ft by 22 ft, this plastered adobe structure has a low pitched, front gabled roof with a bell tower at its front. Although its primary purpose was for use as a schoolhouse, the Canelo School also served as a site for political meetings, dances, plays, picnics, and funerals. (Andrew Gorski)

CANOA RANCH
Green Valley

The ranch was first established in 1821, as the San Ignacio de la Canoa Land Grant deeded to Ingancio and Tomas Ortiz, who were forced from the land by the Apaches who burned their homes. The Canoa Ranch was purchased in 1876, by Maish and Driscoll, who raised cattle, owned a stage line, and developed the Canoa Land Company. It was sold in 1912, to Levi H. Manning, who expanded the complex. At its peak, the ranch controlled more than 100,000 acres and provided housing and a school for 35-40 ranch hands and their families. It became a focal location in the Santa Cruz Valley. The Canoa Ranch was divided and sold following the death of Howell Manning, Sr., in 1951. The ranch complex has recently been purchased by Pima County. (Linda Mayro)

CARNEGIE FREE LIBRARY (TUCSON CHILDREN'S MUSEUM), NRHP
Armory Park
200 South Sixth Avenue
Tucson

(1900-1901, Trost & Trost/Henry Trost, designer; Dome destroyed, 1941; wing addition, 1938; garden wall addition, 1961, by Arthur Brown, FAIA) After having survived numerous trials, including fire, this Neoclassical Revival building displays its remaining materials and fine craftsmanship. In front of the library is the massive Freeman Memorial Bench, designed in 1920, by Bernard Maybeck, and sculpted by Bejamino Bufano. (Nequette and Jeffery 2002)

CARRILLO SCHOOL, NRHP
Barrio Libre
440 South Main Avenue
Tucson

(1930, Merritt Starkweather, FAIA, architect; R. H. Martin, contractor; renovation, 1994, by M3 Engineering) Twelve original classrooms were built in the Mission Revival style on the exterior, with craftsman woodwork inside, including the wide doors of dark stained wood. There were several later additions and renovations, including filling in the pool that the school board had inherited when they purchased the Elysian Groves property from Emmanuel Drachman. (Nequette and Jeffery 2002)

CATALINA FOOTHILLS ESTATES

Tucson

The Catalina Foothills Estates is the name given to an ambitious subdivision development designed by Josias Joesler, John Murphy, and Helen Murphy beginning in the late 1920s. Located in the foothills of the Santa Catalina Mountains, this development began with the purchase of 7,000 acres of land. Joesler and the Murphys intended to create a Mexican-style community with all the amenities needed to attract affluent buyers. By the 1940s, many of Tucson's elite bought into the development, which, true to its original design, combined rural character with municipal conveniences. Catalina Foothills Estates was one of the earliest master-planned communities in southern Arizona. Today, dozens of homes dating to the original development still exist within the area, beside homes built in more recent years. (Brooks Jeffery)

CHEMISTRY BUILDING, NRHP

University of Arizona

Tucson

(1936, Roy Place; M. M. Sundt, contractor; additions 1948, 1962) Built one year after the Humanities Building, the multiple Romanesque Revival characteristics here are similar—columns with Corinthian capitals, round arches with contrasting white and red brick vouissors, and the arched brick corbeling along the gable ends. Here, however, an extremely vertical expression is created by a series of deeply recessed arches on the facade, and the terra cotta tile panels feature a diamond pattern. (Nequette and Jeffery 2002)

CHICAGO STORE

130 East Congress Street

Tucson

(1903, David H. Holmes) Built for the Los Angeles Furniture Company, this is a good example of twentieth century main street commercial architecture, with brick-bearing walls and a cornice carried on brackets, supported by paired pilasters and capitals. A new roof structure was added in 1999, above the pressed tin ceilings and original oak staircase. (Nequette and Jeffery 2002)

CIENEGA BRIDGE, NRHP

Southeast of Vail

The Cienega Bridge was built in 1921, as part of the Borderland Highway project across southern Arizona. The bridge is a concrete and reinforced steel structure designed as a medium-span concrete arch, with a two-span concrete girder viaduct over a branch of the Southern Pacific Railroad. It was one of three virtually identical open-spandrel concrete arches built in Pima, Pinal, and Yavapai counties, although the Cienega Bridge was the longest, with a span of 146 ft. The bridge was nominated for inclusion in the National Register for its significance to local transportation history and was placed on the National Register of Historic Places in 1988. (Pima County 2000)

CIRCLE Z RANCH

Arivaca Junction

State Route 82 Southwest of Patagonia

(1874; 1925, John P. Burton) The Circle Z Ranch is located by Sonoita Creek, just south of Patagonia. The property lies on part of the Mexican San José Grant, the smallest land grant in Arizona. The first American to homestead the Circle Z property was Denton Gregory Sanford of New York, who arrived in 1874, to raise cattle. In the 1880s, he switched to a very profitable sheepherding operation. Adobe ruins of his original hacienda still remain. In 1925, the Zinsmeister family purchased the 5,000-acre Sanford Ranch and developed one of the finest guest ranches in the state. John P. Burton, the builder of the Nogales City Hall, constructed the guest ranch buildings. When the main ranch house burned to the ground in 1952, the original Zinsmeister house became the ranch lodge. Over the years, the ranch property has been the location for movie filming, a television western series, commercials, and *Arizona Highways* photo shoots and articles. Today, the owners of the Circle Z run the oldest continuously operating dude ranch in Arizona. (Linnéa Caproni)

COCHISE HALL, NRHP

University of Arizona

Tucson

(1920-1921, Lyman & Place) The large scale and elaborate ornament of this two-story Classical Revival raised porch will typically make one pause to look at the eight finely crafted Corinthian columns. (Nequette and Jeffery 2002)

COLOSSAL CAVE, NRHP

Old Spanish Trail/Colossal Cave Road

Discovered in 1879 by a local ranch hand looking for stray cows, Colossal Cave consists of 39 miles of subterranean caverns and connecting tunnels, two miles of which are currently open to the public. Attempts to develop the cave for public access began in earnest in 1917, and by 1922, a formalized trail system was in place. Between 1934 and 1937, the Civilian Conservation Corps (CCC) occupied a portion of the nearby Posta Quemada cattle ranch, and implemented an ambitious plan to upgrade and expand the visitor's facilities. The results transformed Colossal Cave into a modern tourist destination. Of note is the visitor's center, a two-story building of southwestern vernacular design constructed from shaped stone quarried from the local hillside. Other facilities built by the CCC include picnic and barbecue areas, rock walls, paths and footbridges, as well as the trail and lighting system in the cave itself. These historic features and those of the Posta Quemada Ranch complex were nominated as a historic district for their tourism, educational, and ranching themes and were placed on the National Register of Historic Places in 1992. (Pima County 2000)

COMMISSARY & QUARTERMASTER OFFICES (FORT LOWELL), NRHP
5479 East Fort Lowell Road
Tucson

The Commissary and Quartermaster's Office were once a part of Fort Lowell, a military base established along the banks of the Rillito River several miles north of Tucson in 1872. This building was a large U-shaped structure with 12-foot-high, unplastered walls vented at the eaves. The commissary was the supply center for all military goods needed to feed, equip, and field troops during the Indian Wars in southern Arizona during the 1870s and 1880s. After the fort was abandoned in 1892, the building was used by Mexican families as a residence. The property is still used for residential purposes today. (Turner, et al. 1982)

COMMUNICATIONS BUILDING, NRHP
University of Arizona
Tucson

(1909, Holmes & Holmes/David Holmes, designer) Built as the first Science Hall, this structure has several similarities with the Douglass Building, because Holmes was involved in the design of the Douglass Building as well. Both buildings are three stories – the lower two of which are exposed Flemish bond brick; the upper floor is in cream-colored stucco with a brick diamond pattern. Both buildings are symmetrical horizontal blocks, using the regular rhythm of vertical windows with a suggested base and capital in a contrasting material or color, and both buildings have tiled hipped roofs. (Nequette and Jeffery 2002)

CONVENT STREETSCAPE & MEYER, NRHP
Barrio Libre
300-400 block of South Convent Avenue
Tucson

Built throughout the 1880s, this area represents one of Tucson's last remaining intact Sonoran streetscapes, thus becoming a snapshot of the urban environment before American influence dominated Tucson's architectural vocabulary. (Nequette and Jeffery 2002)

CORBETT HOUSE, NRHP
El Presidio
179 North Main Avenue
Tucson

(1907-1908, Holmes & Holmes) Not only an excellent example of Mission Revival style, this house is in good condition and open to the public as part of the Tucson Museum of Art. The colors used both inside and outside are typical of the time period, and the wood trim in the interior is typically plain in shape and used as a contrasting and repetitive element against the light-colored walls – indicative of craftsman interiors which were often found in Mission Revival houses. (Nequette and Jeffery 2002)

CORDOVA HOUSE, NRHP
171-177 North Meyer Avenue
Tucson

(1848; restoration, 1973-1975, by E. D. Herreras, FAIA) This small building is an excellent example of an early Sonoran rowhouse, typical of the barrios that originally extended from this site south to the Barrio Libre. Under the stewardship of the Tucson Museum of Art, La Casa Cordova is home to several models and interpretive exhibits related to the development of the Tucson Presidio and early settlement. (Nequette and Jeffery 2002)

CORONADO HOTEL
410 East 9th Street
Tucson

(1928, Roy Place; renovation and adaptive reuse, 1991, by Collaborative Design Group) This hotel on the edge of the historic 4th Avenue business district is typical for its time: a four-story box of rooms with an elegant public lobby and inviting Mission Revival entry facade. The 1991 conversion to single-room occupancy apartments provides a good model for both adaptive re-use and preservation of this common historic Tucson building topology. (Nequette and Jeffery 2002)

COW PALACE (KINSLEY RANCH SITE)
Pima County
Amado

(1930) The site of Kinsley Ranch lies south of Sahuarita and 30 miles south of Tucson. Otho Kinsley, Sr., founded the ranch around 1930. In 1915, as a teenager, Kinsley moved with his family from California to the San Rafael Valley. Kinsley earned money for the ranch down payment by working on a highway gang during the depression. Eventually, Kinsley's 640-acre spread combined a bar, restaurant, swimming pool, service station, official adobe jail, dance hall, rodeo arena, airport, lake, and a farm. Kinsley's diverse interests ranged from selling livestock to rodeos in Utah, Nevada, New Mexico, and Arizona, to well-drilling, pig-raising, airplane flying, mining, flower wholesales, water-witching, and much more. Otho Kinsley died in 1961. Today, the bar-restaurant-swimming pool-motel area is the Cow Palace restaurant. Across the street is the Longhorn Grill (built in the 1970s), another restaurant known for its longhorn façade and its inclusion in movie sets. (Linnéa Caproni)

CRANZ, FRANK F. HOUSE, NRHP
321 Arroyo
Nogales

(Early 1900s) The largest Queen Anne style-influenced residence in Nogales, the Frank F. Cranz House was built for the prominent mining man and Mayor of Nogales (1904-1906). Constructed of local tufa stone of a random, coursed ashlar finish, the exterior includes a hipped roof with a unique conical turret. A high level of craftsmanship is seen in the wood details and leaded glass window sashes. (Andrew Gorski)

CRAWFORD HILL HISTORIC RESIDENTIAL DISTRICT, NRHP
Roughly bounded by Oak Street, Terrace Avenue, Compound Street, and
Interstate 19/Grindell
Nogales

Crawford Hill Historic Residential District was built on the gentle slopes west of the arroyo dividing Nogales. It became the most substantial residential district in the city and has representative buildings from all periods of Nogales' history. The district includes 216 buildings, of which 164 are considered contributing and 52 are considered non-contributing. (Andrew Gorski)

CRITTENDEN GHOST TOWN
3 miles north of Patagonia

(1860s) Just three miles northeast of Patagonia, the historic 1860s townsite of Crittenden experienced its highest development in the 1880s, due to its location next to the railroad and to the steady stream of miners hauling in ore for shipment. Incoming mule teamsters lodged in Crittenden's hotel, constructed in 1885, and run by John Smith. This community declined when Rollin Richardson founded the town of Patagonia and influenced the relocation of ore-loading operations from Crittenden to his new town. Crittenden residents followed soon after. Today, the ground floor of the original hotel is the lone remnant of Crittenden's heyday. (Linnéa Caproni)

CROWN C RANCH GUEST RETREAT
Sonoita

(1930s) The Crown C Ranch Guest Retreat has been operating since the mid-1930s. It is located on the much larger Crown C Ranch spread, now parceled, which, prior to the 1930s, was part of the extensive Empire Ranch. The original 1930s ranch house, constructed of handcrafted adobe, and the historic ruins of the 1867 U.S. military fort, Camp Crittenden, lie on the guest retreat property. (Linnéa Caproni)

CUSHING STREET BAR
Barrio Libre
343 South Meyer
Tucson

(circa 1869; addition, 1973, by Harris Sobin/Blanton & Company) Originally built as the Ferrin House, this property was converted to a store in 1880. South on Meyer Street is a 1973 addition including a small patio and restaurant, which is modern in form, material, and restrained detail, and yet compatible with the existing historic structures. (Nequette and Jeffery 2002)

DAVIS SCHOOL
500 West Saint Mary's Road
Tucson

Designed by the architectural firm of Forbes and Nevin, the Davis School was built in 1901, and named for William C. Davis, one of the school board members at the time. The school was constructed as a two-story brick building with a hipped wood-shingle roof. This original core is extant, but the building has been stuccoed and expanded by a series of one-story additions over the years. Historically, Davis School and Holy Family Church (at Main Avenue and University Boulevard) have functioned as the two institutional anchors of the community known as Barrio Anita. Many families in the barrio have lived there for the past century, and all of the family members were students at Davis. The school is still a vital, integral part of this community. (Morgan Rieder)

DESERT LABORATORY, NRHP, NHL
Tumamoc Hill
West Anklam Road
Tucson

The Desert Laboratory of the Carnegie Institution was opened in 1903, as a center for the study of North American desert ecology. It became world famous for its research. Situated halfway up on the eastern side of Tumamoc Hill, the laboratory originally consisted of three, single-story buildings, each of which was constructed from the basalt boulders that characterizes the hillside. Building 801, the main laboratory, was designed with a high-hipped roof built in a U-shaped plan with an attached greenhouse. Building 802 is a smaller structure of similar design, built in 1906, as an extension of the main building. Building 803 is a flat-roofed structure with projecting vigas built in 1906, as a residence for visiting scientists. The Desert Laboratory is a National Historic Landmark that was listed on the National Register of Historic Places in 1966. (Huston 1985)

DODSON-ESQUIVAL HOUSE, NRHP
1004 West Alameda
Tucson

(circa 1921, James Dodson, builder) This Spanish Colonial Revival house features the typical asymmetrical façade, with smooth stuccoed walls and Moorish ornament, including intertwined geometric forms and twisted concrete columns on the eastern concrete portal, framing the main window into the living room. The seven very large elliptical urns that look like spinning tops are used to accentuate the corners and high point of the portal. (Nequette and Jeffery 2002)

DOUGLASS BUILDING, NRHP
University of Arizona
Tucson

(1904, Russell, Mauran & Garden) The unique design of the central façade continues to delight viewers. The tiny entry between two closely spaced Doric columns appears to be sinking beneath the weight of the composition of the doors, window, and balcony above. (Nequette and Jeffery 2002)

DUNBAR, GEORGE W. HOUSE, NRHP
605 Sierra
Nogales

This was the residence of the first developer in Nogales, George Dunbar, who arrived in 1914, from California, and who is responsible for much of the twentieth century residential character of Nogales, Arizona, and Nogales, Sonora. His Nogales projects included the Ellis Tract, the Smelter Tract, the Silver Bell Addition, Dunbar Bungalow Court, and the Mountain View Addition. His residence is noted for its use of concrete bricks, a constructional system not widely utilized in other towns during this time. (Andrew Gorski)

DUNBAR SPRING SCHOOL, NRHP
9th Street off Main Avenue
Tucson

This important neighborhood landmark began as a two-room schoolhouse in 1918, designed by prominent architect and seven-term mayor Henry O. Jaastad. It served as the segregated school for blacks from 1918, until 1951, when Tucson was desegregated. Additions, also designed by Jaastad, were built in 1921, 1930, 1935, and 1941. A final addition was built in 1948, and the school was changed from an elementary school to a middle school and renamed for local educator John Spring. In 1966, a library addition (designed by Cook and Swaim) was built. The school is currently undergoing renovation as an African-American cultural center. (Marty McCune)

EL CHARRO, NRHP
El Presidio
311 North Court Avenue
Tucson

(1900, Jules le Flein, who was the stonemason that carved the stone rose portal for the San Augustine Cathedral) The house has a central plan with a stairway down to a basement lined with stone. It was originally set back slightly from the street, but adjacent to the houses on either side. The A-Mountain stone piers of the front porch were added later. (Nequette and Jeffery 2002)

EL CON WATER TOWER, NRHP
Broadway Boulevard and Randolph Way
Tucson

(circa 1929, Roy Place, architect; John W. Murphey, builder; restored, 1994, by M3 Engineering & Technology) This tower was designed to cover a large water tank supplying the new subdivision of Colonia Solana and the El Conquistador Hotel. Although the tower was a functional necessity, the Spanish Colonial Revival covering was intended to draw attention to the subdivision, the architect, and the builder. The wrought iron weather vane depicting a prospector and his donkey is almost 4 ft in height. (Nequette and Jeffery 2002)

EL PASO & SOUTHWESTERN RAILROAD STATION (GARCIA'S)
419 West Congress Street
Tucson

(1912-1913, Henry C. Trost; remodeled and partially demolished, 1982) Little remains of this once magnificent railroad station, built by the Phelps Dodge Company to serve their copper interests in Bisbee and Douglas after disagreements with the Southern Pacific Railroad. Still visible is the central rotunda covered by a stained glass dome and protected by a skylight. (Nequette and Jeffery 2002)

EL TIRADITO, NRHP
221 South Main Avenue
Tucson

(present location, circa 1894-1909) Spanish for "the little cast-away one," El Tiradito refers to the site of a murdered man, which became a traditional place for Mexican-Americans to say a prayer for his soul and to make a wish. The new site was deeded to the city in 1927, the same year the Tucson City Council chose an official version of the many legends associated with the shrine. (Nequette and Jeffery 2002)

EMPIRE RANCH, NRHP
East of Greaterville

The Empire Ranch is located among rolling grasslands adjacent to the Empire Gulch, an intermittent stream in the middle of the Cienega Valley. Started in 1876 as a 160-acre holding, the ranch became one of the largest in the west, eventually covering an area 60 miles north/south by 30 miles east/west, stretching from the Rincon Mountains to the Mexican Border. Initially owned by a number of men, the ranch was bought in 1881, by Walter Vail, after whom the town of Vail is named in part. Vail expanded the ranch in the mid-1880s, taking time to also serve in the territorial legislature and on the Pima County Board of Supervisors. Vail was killed in a streetcar accident in Los Angeles in 1906. The adobe ranch house was listed on the National Register of Historic Places in 1975. (Pima County 2000)

ENGINEERING BUILDING, NRHP
University of Arizona Mines and Engineering
Tucson

(1917-1918, J. B. Lyman) The three-story structure is reinforced concrete with steel supports inside the eight Doric terra cotta columns. The floor plan is a square doughnut, with the cornice line wrapping around the entire building and the roof dramatically de-emphasized. (Nequette and Jeffery 2002)

ERICKSON HOUSE (TUCSON MEDICAL CENTER)
5301 East Grant Road
Tucson

(1926-1927, Henry Jaastad) Now part of the Tucson Medical Center is one of the few remaining structures from the original Desert Sanitarium of southern Arizona. This complex served the many health seekers who flocked to Tucson and aided in the development of a local sanatorium industry. It was built in the Pueblo Revival style, combining adobe walls with steel beams concealed behind cement plaster. (Nequette and Jeffery 2002)

ESMOND STATION
Old Vail Road and Esmond Road

Esmond Station includes the remains of a major railroad watering stop; the buildings were constructed around 1910. Standing buildings include a long adobe building which was thought to be used as railroad worker housing, and a single family dwelling – probably for the station master. Various pumps and water tanks were also present on the site at one point. The use of adobe for the worker housing is unusual. Both buildings and many of the associated features have been significantly vandalized; the property is on state land (Marty McCune).

FINLEY, JAMES HOUSE, NRHP
12 miles south of Patagonia
Harshaw, Coronado National Forest

(1877) The Finley House is located in the ghost town of Harshaw. It was built around 1877, as the residence of the Hermosa Mine superintendent, but was later occupied by the mine's owner, James Finley. The site property lies within 100 yards of the Hermosa Mining Company mill and may have also served as the company office. The house is constructed of brick, which is unusual, because most buildings of this time period were of adobe construction. Other features include stone lintels and California redwood porch beams. Modern additions to the original 3-room house include a bedroom and a kitchen. The Finley House is significant not only as one of the few remaining buildings from Harshaw's mining boom period, but also as a good example of early Territorial architecture. (Linnéa Caproni)

FISH-STEVENSON HOUSE

El Presidio

119-133/151-163 North Main Avenue

Tucson

The Fish-Stevens House consists of two adobe Sonoran row-style houses – one at the corner of Main Avenue and Alameda Street, owned by Edward Nye Fish (built in 1868), and one further north on Main Avenue, owned by Hiram Stevens (built in 1865). Both buildings are used today by the Tucson Museum of Art as galleries. Fish was a prominent businessman, and his wife, Maria Wakefield, was prominent in public education. Hiram Stevens was also a successful businessman and politician, and he was married to Petra Santa Cruz, great-granddaughter of a Spanish pioneer. (Marty McCune)

FOX THEATER

27-33 West Congress Street

Tucson

(1929, M. Eugene Durfee; closed 1974, under renovation) This was one of a national chain of movie theaters showing Fox Studio Productions and decorated with ornate Art Deco stylistic motifs expressing the grandeur and opulence of pre-Depression movie houses. Renovation is currently underway to revitalize the theater and to restore the Art Deco features, including the street facade, neon marquee, interior ceiling mural, gold fluted columns, ornate light fixtures, and even the original organ pipes. (Nequette and Jeffery 2002)

FRAY MARCOS DE NIZA MONUMENT

Lochiel

(1939, National Youth Administration) This monument marks the location of Fray Marcos De Niza's entry into the San Rafael Valley in 1539. The event was the first known entry by a European into United States territory from Mexico. Credited with discovering the Seven Cities of Cibola, Fray Marcos de Niza inspired Coronado's expedition into this same region. The monument, constructed by members of the National Youth Administration and dedicated in 1939 to commemorate the four hundredth anniversary of Marcos de Niza's crossing, is located on Forest Road 61, just north of Lochiel. The concrete monument, including the connecting walls and benches, is in good condition and should be considered for inclusion in the National Register of Historic Places for its association with a historic event. (Andrew Gorski)

FRED LAWRENCE WHIPPLE OBSERVATORY

Mt. Hopkins, near Amado

(1968) Located at the base of Mt. Hopkins in the Santa Rita Mountains, 35 miles south of Tucson, at an altitude of 8,500 ft and just within the boundary of the Coronado National Forest, the Fred Lawrence Whipple Observatory Visitors Center features displays and exhibits on astronomy and astrophysics, natural science, and cultural history. The Smithsonian Institution Astrophysical Observatory (SAO) and the University of Arizona operate it jointly. Formerly known as the Mount Hopkins Observatory, it was renamed in 1982, for the American astronomer Fred Lawrence Whipple, who was instrumental in establishing the observatory. It is the largest field installation of the SAO outside Cambridge, Massachusetts. The Fred Lawrence Whipple Observatory has been used as the site for experiments requiring extremely dark skies, dry climate, and good optical viewing. (Linnéa Caproni)

GALLERY IN THE SUN

6300 North Swan Road

Tucson

(circa 1950, Ted deGrazia) Hand-built and decorated by local painter DeGrazia, the thick adobe walls, buttressed corners, and rounded building forms evoke the architectural expression of New Mexico, but with a greater folk tradition. The isolation this complex once enjoyed has been compromised by the growth in this area of the foothills. (Nequette and Jeffery 2002)

GARDEN OF GETHSEMANE

Congress Street and Bonita Avenue

Tucson

This intriguing outdoor garden was built by Felix Lucero to house the sculptures of the Last Supper and other religious subjects. There is a strongly surreal juxtaposition of the multilevel courtyard overlooking the Santa Cruz riverbed, as one is surrounded by images of the life and times of Christ, a high voltage tower, and the daytime homes of the homeless. (Nequette and Jeffery 2002)

GAS STATION (ART DECO)

648 North Stone Avenue

Tucson

One of a small number of Art Deco buildings in Tucson, this gas station along one of Tucson's original major thoroughfares was designed in 1936, by Cecil Moore. The white stucco building features a conical roof reminiscent of the swirl of an ice cream, on the cylindrical office space, and a canopy with a curved fascia at the end. (Brooks Jeffery)

GILA HALL, NRHP
University of Arizona
Tucson

(1937, Roy Place; P. S. Wombach, contractor) Built on the original site of the 1893 president's residence, the U-shaped plan of this three-story brick dormitory creates a private courtyard on the northern side. As in all of Roy Place's work, the brick coursing is inspired – patterned and varied, never dull. Gila Hall was the last campus building constructed with Public Works Administration funds. (Nequette and Jeffery 2002)

GOODRICH HOUSE
645 East University Boulevard
Tucson

(1908, Henry Trost) In its vertical proportions, light stucco, dark wood trim, and corner piers and deep overhangs on a steeply pitched roof, this house has a strong resemblance to the 1904 Dana House by Frank Lloyd Wright, and seems somewhat out of place here. It does, however, reflect the long-standing trend, especially at this time, for Tucsonans to import styles from eastern and Midwestern sources. (Nequette and Jeffery 2002)

GRACE LUTHERAN CHURCH
830 North 1st Avenue
Tucson

(1949, Henry Jaastad) Because this church appears relatively modest on the exterior, it is an unexpected surprise to experience the spacious quality of the interior. The wooden beams supporting the high pointed vault echo the rhythm and soaring expression of a Gothic church. (Nequette and Jeffery 2002)

HACIENDA CORONA DE GUEVAVI (BED & BREAKFAST)
348 South River Road
Nogales

(1935) Hacienda Corona is the former Guevavi Ranch headquarters. Records show the property was originally homesteaded by the Benedict family in the early 1900s. According to the current owner, Wendy Stover, the hacienda was constructed around 1935, possibly over an older foundation, and its name honors the Mexican muralist and bullfighter, Salvador Corona, who painted its courtyard walls with scenes of Mexican peasants during the 1940s-1950s. Later, after then-owner Ralph Wingfield lent some of his cattle for use in the filming of the 1948 John Wayne classic, *Red River*, the hacienda became a Hollywood getaway. The rancher and Wayne were close friends, and the hacienda room in which Wayne frequently lodged is now a B&B room named "The Duke." The original card table the two used is also still present in the hacienda. Most of the ranch buildings are adobe with stucco, except an addition on the hacienda, which is block and stucco. The current owners beautifully restored the hacienda after their 2002 purchase. (Linnéa Caproni)

HARRISON, SENATOR JAMES A. HOUSE, NRHP

Morley Street

Nogales

The best-preserved two-story bungalow in Nogales, this house was built for prominent Nogales politician and businessman, Senator James A. Harrison. A prominent example of a residential construction executed in tufa stone, the house depicts the lineal development along Morley Avenue, a mixed-use street frontage, northward, during the second decade of the 1900s. The current use of the house is a commercial beauty saloon and school. Its additions are incompatible with the original structure. (Andrew Gorski)

HARSHAW GHOST MINING TOWN

Coronado National Forest, approximately 10 miles south of Patagonia

(1877) The development of the Harshaw townsite relates to ex-infantryman David Tecumseh Harshaw, a prospector who discovered the prosperous Hermosa silver mine in the Patagonia Mountains. The town of Harshaw developed nearby, on the property of the old Mexican settlement of Durazno. Between 1877-1882, Harshaw boasted a 1-mile-long main street, a 20-stamp mill, 7+ saloons, a newspaper, post office, a hotel, a population of 2,000, and more than \$1 million generated from the Hermosa ore. Harshaw's decline began with an 1882 storm that left many buildings destroyed. Today, the ruins of a few buildings and a cemetery are all that remain of this once-prosperous settlement. (Linnéa Caproni)

HEALY HOUSE, NRHP

Armory Park

324 South 6th Avenue

Tucson

(1900-1902, Henry Trost) The deep porch facing east and the pyramidal roof may be additions to this large, single-story adobe house. The Greek Revival porch uses fluted columns to support an entablature above which the hipped roof forms the shape of a Greek temple pediment. (Nequette and Jeffery 2002)

HEREFORD HOUSE, NRHP

El Presidio

330 North Main Avenue

Tucson

(1902, Henry Trost) From Main Avenue, this two-story, stuccoed brick house appears to be a large cube with the projecting flat roofs that are often associated with the Prairie style and Frank Lloyd Wright's Unity Temple. It is also reminiscent of the work of Irving Gill, the pioneering California architect who explored a modern approach to the Spanish Colonial Revival styles that resulted in a simplified version, including very smooth white walls, round arcades, and vertical rectangular window openings. (Nequette and Jeffery 2002)

HERRING HALL, NRHP
University of Arizona
Tucson

(1903, David Holmes) In the tradition of turn-of-the-century campus architecture, this hall is a Classical building with a portico that consumes the entire western front. While monumental in form, it is humble in both size and the fact that it and its Roman Doric columns sit on the ground instead of being raised on a podium. The building is scheduled for renovation. (Nequette and Jeffery 2002)

HINCHCLIFFE COURT, NRHP
El Presidio
405 North Granada
Tucson

(1910-1911, attributed to Holmes & Holmes; extensive interior remodeling, 1994) Conceived as Arizona's first resort catering to a public enamored with automobile travel, this auto court of 10 small wooden bungalows is arranged in a horseshoe plan, with the open end facing Granada Avenue. The center area, which was originally used for parking, is beautifully landscaped today, with a variety of desert and imported plants attractive for their color and scent. (Nequette and Jeffery 2002)

HINCHCLIFFE HOUSE, NRHP
El Presidio
330 North Granada Avenue
Tucson

(1910, Holmes & Holmes, architect; Orin Anderson, contractor/builder) An excellent but deteriorating example of the Western Stick style bungalow. The small apartment in the back of the house is a miniature version of the main house. Unfortunately, the design detailing of very small wooden members—meant for a Japanese climate—cannot be protected from Tucson's dry heat and monsoon rain. (Nequette and Jeffery 2002)

HISTORIC WAREHOUSE DISTRICT, NRHP WAREHOUSE
Tucson

The Tucson warehouse district is located along the Union Pacific Railroad north of downtown Tucson, where between 1900 and 1948, it became the primary distribution center of goods for Tucson and southern Arizona. The district contained core railroad buildings and structures, warehouses for wholesales and freight companies, light industrial facilities for manufacturing and food processing, and early automotive showrooms and garages—all focused on the railroad. The buildings are visually coherent, because they share common forms and a common scale. (Rieder 1999)

HOLY FAMILY CHURCH
338 West University Boulevard
Tucson

The church was built by Bishop Granjon at his own expense; it was noted for service clubs such as St. Vincent's and Santa Teresitas. Constructed of adobe by Manual Flores (contractor) in 1913, this prominent Mission Revival building has Gothic Revival influences. It remains an important influence in the neighborhood today. (Marty McCune)

HOTEL BLANCA, NRHP
456 Morley Avenue
Nogales

The Blanca Hotel is a unique indigenous commercial building, with modest influence of second renaissance Revival seen in the classical cornice and second level balconies. Built as storerooms and a hotel by Leonardo Gomez, it is the largest example of this building type, as well as the largest cast-in-place concrete building of its type. Consisting of a flat, corrugated sheet steel roof with a decorative cornice, the Hotel Blanca has wrought iron balcony railings, an offset entry, and large storefront windows. It currently functions as transitional housing and a social services office. (Andrew Gorski)

HOTEL CONGRESS
311 East Congress Street
Tucson

(1919, Roy Place; renovation, 1985, by Eglin Cohen Architects) The location directly across from the Southern Pacific Railroad depot made this an ideal hotel and residence for winter visitors. Exposed brick-bearing wall construction on the exterior is complemented by a gracious lobby, with high ceilings opening onto spaces containing a restaurant, bar, and shops available to hotel guests and to the public. (Nequette and Jeffery 2002)

HOUSE AT 365 WALNUT STREET, NRHP
365 Walnut Street
Nogales

(1909) The adobe residence at 365 Walnut Street exhibits a rare, highly localized artistic façade treatment that incorporates regional folk art as a building element. Constructed circa 1909, the house was altered prior to 1930, when stucco coating was applied and Spanish tile was inlaid along the roofline of the entry porch. The stucco was uniformly ornamented by an exaggerated fan pattern. Both treatments were intended to highlight the house and make it locally unique for the artistic effect of its detail. (Andrew Gorski)

HOUSE AT 459 WALNUT STREET, NRHP

459-465 Walnut Street

Nogales

Prominently viewed at the bend in Walnut Street, this property is noted for its rare use of Second Renaissance Revival style in residential architecture. It is also the best local example of cast-in-place concrete residential construction. Classical pilasters and cantons and a flat roofed portico supported by two classic square columns are other notable features of this residence. (Andrew Gorski)

HOUSE ON MORLEY STREET, NRHP

Morley Street

Nogales

This building features unique characteristics of the High Victorian Italianate (use of stilted segmented arch with vertical continuation of architectrave moulding; pedimental forms at dormers that are unrelated to anything in the façade below) and Neo-colonial Revival (strict attention to symmetry and use of hipped roof) architectural styles. Field verification in April 2004, confirmed the building as unoccupied. (Andrew Gorski)

JULIAN-DREW BUILDING/LEWIS HOTEL, NRHP

178-188 East Broadway Boulevard

Tucson

(1917; facade renovation, 1982-83, by Eglin Cohen & Dennehy Architects) The ground floor of this two-story brick structure has the large picture windows associated with commercial use. The second floor, originally a hotel with screened porches for guests, is now used as apartments. (Nequette and Jeffery 2002)

KENTUCKY CAMP, NRHP

Coronado National Forest

Sonoita

Located on the Coronado National Forest, the Kentucky Camp Historic District includes buildings, structures, and archaeological sites relating to hydraulic placer mining in southeastern Arizona. Kentucky Camp was constructed as the headquarters of the Santa Rita Water and Mining Company, which was founded in 1902, to revitalize the worked-out Greaterville gold placers with intensive hydraulic mining. Despite its ambitious scale of operations, the endeavor proved an economic failure and closed in 1906. The district includes elements that, together, represent the system of hydraulic mining utilized at the Kentucky Camp. The site was nominated to the National Register of Historic Places due to its association with early twentieth century mining technology and was listed in 1995. (Pima County 2000)

KINO SPRINGS GOLF RESORT
State Route 82 northeast of Nogales

(1930s) The Kino Springs Golf Resort is located on the property of the Spanish *Estancia Yerba Buena* land grant, deeded in 1817, by the King of Spain. The land changed into Anglo hands later in the nineteenth century. In the 1930s, British actor Stewart Granger and actress Jean Simmons purchased the property. They constructed ranch buildings, of which one was the private bungalow of their friend and fellow actor, John Wayne. In 1970, the golf resort was built and named Kino Springs in connection with Father Kino and the springs on the property named after the same. (Linnéa Caproni)

KITCHEN, PETE RANCH, NRHP
5.5 miles north of Nogales off U.S. 89

(1854) This was one of the best-known pioneer ranches in southwestern Arizona during the latter 1800s. Pete Kitchen, who supplied ham to Tucson and military establishments of the area, established the ranch in 1854. The Kitchen Ranch was one of the few existing ranches in the Santa Cruz Valley during the height of the Apache attacks. Thus, it became a haven for travelers at times of danger. The original adobe building is standing, as is the larger and later ranch house. Both have had new roofs and improvements made to them. (Andrew Gorski)

KITT HOUSE, NRHP
Armory Park
319 South 4th Avenue
Tucson

(1899, Katharine Kitt) Unusual for the Greek Revival in Tucson, the façade of this house is the only example of a complete classical temple portico. Also surprisingly, the house is built of adobe and extended through the deep porch that occupies the entire west end. Diagonal interior walls suggest an interest in the Queen Anne style. (Nequette and Jeffery 2002)

KRESS, S. H., & CO. BUILDING, NRHP
48 Morley Avenue
Nogales

This building is significant in that it is the best local example of a brick commercial style building. In addition to its decorative brickwork and cast stone keystones above second-story flat arched windows, the structure features a pedimented parapet with a pressed metal cornice below. At street level, two symmetrical bays with aluminum-frame display windows surround the two symmetrically placed recessed entries. (Andrew Gorski)

KRUTTSCHNITT HOUSE (EL PRESIDIO BED & BREAKFAST), NRHP

El Presidio

297 North Main Avenue

Tucson

Beneath the 1899 Victorian dress of this building is a traditional Sonoran rowhouse built of thick adobe walls and a flat roof. This hybrid demonstrates the evolution of stylistic preferences by Tucsonans as a result of the arrival of the railroad and the influence of national trends in building design and aesthetics. (Nequette and Jeffery 2002)

LAS DOS NACIONES CIGAR COMPANY FACTORY, NRHP

204 Morley Avenue

Nogales

(1897) This building is significant in its association with pioneer businessman Richard Lewis Fleisher, who founded Las Dos Naciones Cigar Company in 1897. He ran the only cigar business in the Southwest from this building until 1917. The building is a unique Nogales example of Greek Revival-influenced commercial architecture. (Andrew Gorski)

LEE-CUTLER HOUSE, NRHP

Armory Park

620 South 3rd Avenue

Tucson

(1910) This house is one of the best examples of the later phase of the Queen Anne Revival. Many of the features can be seen from the street (through the trees), such as the round turret capped by a conical roof. (Nequette and Jeffery 2002)

LINCOLN HOUSE, NRHP

Armory Park

422 South 5th Avenue

Tucson

(1902, Henry Trost) Many of the signature Trost elements are evident in this one-story stuccoed house. His Prairie style composition is based on a cube, and balances receding and projecting forms in the overhanging flat roofs and the columns of the porch. The ornamented fascia is also typical of Trost. (Nequette and Jeffery 2002)

LOCHIEL HISTORIC DISTRICT

Lochiel

(1880) Lochiel is where the first European explorer west of the Rockies, Fray Marcos de Niza, entered the San Rafael Valley on 12 April 1539. Lochiel's post office was established 23 August 1880, and was discontinued 30 September 1911, sequentially under the three names Luttrell, La Noria, and then Lochiel. At its peak were 2 smelters, 3 saloons, a butcher, bakery, livery stables, 5 stores, and a boardinghouse. The Lochiel border crossing was closed in the early 1980s due to budgetary concerns. Today, a family lives in and maintains the buildings in the district, including the small chapel. (Andrew Gorski)

MAC ARTHUR BUILDING (HOTEL HEIDEL)

345 East Toole Avenue

Tucson

(1907-1908, Holmes & Holmes; renovated, 1980, by Collaborative Design Group/Frank Mascia) Built to serve passengers arriving in Tucson at the new Southern Pacific train depot, this triangular, three-story building has stately proportions. Elements from both Mission Revival and Prairie styles are incorporated, although neither style is dominant. (Nequette and Jeffery 2002)

MANNING CABIN, NRHP

Saguaro National Monument East

L. H. Manning, at one time the Surveyor General of the territory of Arizona, and later Mayor of Tucson, homesteaded a 160-acre section in the Rincon Mountains and erected a cabin as a vacation home in 1905. The cabin was built as a single-storied, two-room structure, with a shed-like space between the rooms that was open on the front side. It had a stone chimney at one end; stone pillars were added later on either side of the front door. The Manning family used the cabin until 1907, when the area was established as a national forest. Thereafter, the cabin was used by a number of people. With the establishment of the Saguaro National Monument, the National Park Service has maintained the cabin and uses it as the quarters for the ranger. It is significant for its association with a prominent pioneer of Arizona and for its association with both the national forest and the national monument. (Holland, 1972)

MANSFIELD MIDDLE SCHOOL

1300 East 6th Street

Tucson

(1929-1930, Roy Place; J. J. Garfield, contractor; addition, 1995, by IEF Group) The distinctive pink color and tower have come to symbolize this Spanish Colonial Revival school. Several additions, including a cafeteria and a library, were built to accommodate the growing school's 17 original classrooms and administrative areas. (Nequette and Jeffery 2002)

MARICOPA HALL, NRHP
University of Arizona
Tucson

(1920, Lescher & Kibbey, and Lyman & Place) The third floor was added by Lyman & Place in 1921. It features a prominent Classical Revival portico with eight paired and stylized Egyptian columns, behind which the brick rectangle of the building sits on a concrete base scored to represent stone. (Nequette and Jeffery 2002)

MARIST COLLEGE (WESTERN END, ST. AUGUSTINE CATHEDRAL)
192 South Stone Avenue
Tucson

The Marist College (1916) and adjacent Our Lady Chapel (1915) are associated with a major Diocesan building program by Henri Granjon, Tucson's last French Bishop. The rare, three-story adobe building is a good example of the Neoclassical Revival Style. (Marty McCune)

MARSH, GEORGE B. BUILDING, NRHP
142-154 Grand Avenue
Nogales

(1905) This building is located next to the Pimería Alta Historical Society. It is significant in its association with one of the most prominent early businessmen in Nogales, George Marsh. The building consists of a series of construction efforts by Marsh, which have been combined into one building with a series of bays. The original portion of the building housed the Nogales post office from 1905 to 1926. In 1908, it housed the Nogales telephone exchange, and in 1914, the Marsh furniture store. (Andrew Gorski)

MARSH HEIGHTS HISTORIC RESIDENTIAL DISTRICT, NRHP
Roughly Bounded by Court Street, Summit Avenue, South Court Street, and Morley Avenue
Nogales

(1909) The Marsh Heights Historic District was developed by prominent Nogales businessman and land developer, George F. Marsh. It was platted in 1905, and developed in 1909. The singular vision of Marsh in the platting and development of the district as an upper-class residential neighborhood has helped to maintain the neighborhood's heterogeneous social and aesthetic character to this day. Marsh Heights is significant in that it is one of the only rectilinear neighborhoods in the city, ignoring topographical limitations – as opposed to most of the other Nogales neighborhoods. The neighborhood is organized around a hilltop central square. The Neo-Classical Santa Cruz Courthouse is located within the district. The buildings themselves range greatly in early twentieth century architectural styles: from Western Colonial to Bungalow to Mission Revival. (Andrew Gorski)

MEDITERRANEAN STYLE HOUSE, NRHP

215 Walnut Street

Nogales

This house is the best local example of a Mediterranean style single-family residence in Nogales. This brick residence displays a unique crenellated circular entrance. It is also notable for its high level of detailing and craftsmanship in its window treatments and wall surfaces and other elements characteristic of the style. (Andrew Gorski)

MEDITERRANEAN STYLE HOUSE, NRHP

245 Walnut Street

Nogales

This brick house with a rusticated stucco exterior exhibits a unique local interpretation of the Mediterranean style, as expressed in the artistic treatment of the façade with decorative floral patterns in plaster relief. Its multiple arched and undulating parapet and trefoil-like arched opening at the main façade also distinguish the residence. (Andrew Gorski)

MEXICAN BAPTIST CHURCH (TEMPLO DE BETHEL), NRHP

Barrio Libre

641 South Meyer Avenue

Tucson

Now a residence, the stone foundation and steps at the entry lead to a doorway spanned with a very shallow segmental arch with a Palladian or tripartite window above. This simple single-room brick structure also features a gabled roof behind the shaped parapet of the façade. (Nequette and Jeffery 2002)

MILLER, HUGO HOUSE, NRHP

565 Potrero

Nogales

The Craftsman Bungalow is the best residential example of concrete brick construction in Nogales. It was the home of Hugo Miller, a prominent Nogales assayer who worked in many of the large mining districts of New Mexico and Nevada before moving to Nogales in 1912. Another distinguishing feature of this residence is its use of cobblestones for the entry piers and foundation. (Andrew Gorski)

MISSILE SITE 8, NRHP, NHL
1580 West Duval Mine Road
Air Force Facility Missile Site
Pima County

This is the site of a Titan II missile silo that contained a nuclear tipped missile on 24-hour alert from 1963 to 1982. Known officially as Titan Missile Site 571-7, this formerly top-secret facility is the sole remaining Titan Intercontinental Ballistic Missile complex left in the country. In 1988, it was opened as a museum, containing both aboveground and belowground components of the launch operations. These components include the operations center, multiple blast shields, crew quarters, and the silo itself, a concrete lined hole 55 ft wide and 154 ft deep that housed a single missile capable of delivering between 10 and 20 megatons to a target 6,000 nautical miles away. The property was included in the National Register in 1992, for its military, architectural, and engineering significance as a symbol of the Cold War. (Pima County 2000)

MONTEZUMA HOTEL, NRHP
108-120 Morley Avenue
Nogales

This building is the dominant structure along Morley Avenue and once served as the center of the economic and social life of Nogales. It is the largest example of the Spanish Colonial Revival style in Nogales today. This building needs preservation and rehabilitation. (Andrew Gorski)

MOWRY GHOST MINING TOWN
13 miles south of Patagonia

(1857) The Mowry settlement that developed around the Mowry Mine is one of the oldest Arizona mining settlements; however, its prosperity was short-lived. Originally worked by Mexicans under the name of the Patagonia Mine, the Mowry lead and silver mine was renamed in 1857, by claimholder Lieutenant Sylvester Mowry of West Point. In 1880, Mowry was arrested for having provided the Confederates with lead for ammunition. After a stint in the Yuma Territorial Prison, Mowry was released, although he never recovered his property. The only present-day structures from the Mowry mining settlement are some adobe and stone building ruins and some mining operation remnants. (Linnéa Caproni)

NOGALES ELECTRIC LIGHT, ICE & WATER CO. POWER HOUSE, NRHP
491 Grand Avenue
Nogales

This is the only remaining building associated with development of electric power in Nogales during the growth of the city. This flat-roofed building was constructed of structural brick with fired brick infill. (Andrew Gorski)

NOGALES HIGH SCHOOL, NRHP

310 Plum Street

Nogales

Nogales High School is the oldest public school building remaining in Nogales. Consisting of a stone foundation and fired brick construction that displays excellent craftsmanship, it is the largest Second Renaissance Building in Nogales. Other notable features include art stone cartouches and brick tablets. (Andrew Gorski)

NOGALES STEAM LAUNDRY BUILDING, NRHP

Nogales

Pioneer Nogales photographer and property owner, W. J. Neuman, built this building. It was used as a steam laundry from 1915 to 1930, and is one of only four buildings remaining in Nogales that represents historic industries. It is the only remaining example of concrete brick construction used in an industrial building in Nogales. (Andrew Gorski)

NOON, A. S. BUILDING, NRHP

185 Grand Avenue

Nogales

(Early 1900s) This building was built by A. S. Noon and is associated with the prominent early pioneer Noon family, who did much to shape the city of Nogales—economically, politically, and socially—through all its historic periods. The northern half of the building once served as a storeroom occupied by Wing Wong, a longtime leading Chinese merchant. This building exemplifies commercial expansion during Nogales' early twentieth century growth period and is the only two-story commercial flatiron building in Nogales built of cast-in-place concrete. (Andrew Gorski)

NUGENT BUILDING, NRHP

University of Arizona

Tucson

(1937, Roy Place) The original building was a simple, two-story brick rectangle, with a pitched roof and the façade facing the mall at the gabled end. The Italian Romanesque revival features include the second-story arch above the entry, composed of an inner and outer arch with alternating colored voussiors on the inner arch. (Nequette and Jeffery 2002)

ODD FELLOWS HALL (SECOND FLOOR NOW ETHERTON ART GALLERY)

135 South 6th Avenue

Tucson

(1919) A good example of an early twentieth century commercial building, with large windows at the ground level, that was usually rented to an automobile-related business. Highlighting the spacious second floor dance hall are three large windows with shallow arches of articulated stonework, including keystones. (Nequette and Jeffery 2002)

OLCOTT HOUSE, NRHP

El Presidio

234 North Main Avenue

Tucson

(circa 1890, Arthur Jacobson, builder/contractor) This detached house is made of fired brick with a compact block form. This was the first house on the western side of Main Avenue to take advantage of the steep slope, by creating one story on Main Avenue and two stories to the west. It is similar to many of the American Territorial houses in the Armory Park neighborhood in both style and material. (Nequette and Jeffery 2002)

OLD ADOBE BARN

Interstate 19, East Frontage Road, near Tumacácori

This barn of unknown age is an excellent example of exposed adobe construction and has a unique significance as an agricultural icon along Interstate 19.

OLD MAIN, NRHP

University of Arizona

Tucson

(1891, James Creighton) The university's first permanent structure blends a Queen Anne vocabulary of stone and brick walls, wooden posts, high-pitched roofs, and chimneys, with climate-conscious features. During the late 1960s, this building survived threats of demolition, which prompted a counter-campaign to document and preserve campus buildings, resulting in the creation of the country's first university campus National Register Historic District in 1985, composed of 35 buildings. (Nequette and Jeffery 2002)

OLD NOGALES CITY HALL AND FIRE STATION, NRHP

136 Grand Avenue

Nogales

(1914, Henry O. Jaastad) Designed in the Mission Revival Style by architect Henry O. Jaastad, the Old Nogales City Hall and Fire Station is a two-story structure, with an attached square bell tower, that is prominently situated in downtown Nogales. The first story is graced by a series of arched openings, while large tripartite windows provide light to the interior at the second story. The roof features metal tiles painted to simulate terra cotta tiles. Originally divided to accommodate the functions of city offices and fire station, the Pimería Alta Historical Society currently uses the first floor and basement as a museum and research library. (Andrew Gorski)

OLD PUEBLO CLUB

115 South Stone Avenue

Tucson

Designed by noted Tucson architect D. H. Holmes in 1907, this was the first building in Tucson with a façade of buff-colored, California pressed brick. It contained a gymnasium, bowling alley, and billiards room, as well as a library and restaurant, rooftop pergola, and garden. Remodeled in 1932, by Roy Place. (Brooks Jeffery)

OLD TUBAC SCHOOLHOUSE, NRHP

Tubac

(1885) This schoolhouse was nominated to the NRHP as a key architectural element of the historic core of the town of Tubac. It is centrally located, and its architecture, a one-story adobe building in cruciform shape, blends with the town's historic architecture, which represents three interacting cultural groups: Spanish, Mexican, and Euro-American. The schoolhouse served as a center and focal point of Tubac community activity and, at the time of its 1970 NRHP listing, was intended for that use again—as a building for community gatherings and museum activities relating to the history of Tubac. (Linnéa Caproni)

OLD TUMACÁCORI BAR

Tumacácori

(1930s) This old bar in Tumacácori was a 1930s cowboy bar and hangout. The current owner holds the oldest liquor license in Arizona. (Linnéa Caproni)

OLD UNIVERSITY OF ARIZONA LIBRARY (ARIZONA STATE MUSEUM), NRHP

University of Arizona

1013 East University Boulevard

Tucson

The Arizona State Museum North building was designed in 1923, by Lyman and Place and is the most impressive building facing the west campus mall. This building is modeled after the Boston Public Library, whose exterior mixes the Classical Revival symmetry with an emerging vocabulary that became the signature of Place's university buildings—including the use of arches as a dominant facade feature, masterful brick detailing, and glazed terra cotta ornament, such as the frieze of opened books on the south facade. The original design included a formal reading room on the second floor, relegating the books to a closed storage area accessible only to librarians. The reading room, now the museum's library, is one of the most elegant interior spaces in Tucson, dominated by two-story arched windows along the southern wall, decorated ceiling beams, a polished concrete floor, and mahogany bookshelves lining the room. Although there have been several additions to this building, it still retains its impressive character and is listed individually on the National Register of Historic Places. (Brooks Jeffery)

PATAGONIA DEPOT

310 MeKeown Boulevard

Patagonia

(1900) The informative plaque on this depot reads: "The Patagonia Depot is a registered historic landmark built in 1900. The station represents the last portion of the New Mexico and Arizona Railroad begun 1881-82 by the Santa Fe and discontinued by Southern Pacific in 1962. Saved from demolition in 1965 by the Patagonia-Sonoita Rotary Club, the Patagonia Depot currently houses municipal offices." During Patagonia's heyday, the railroad depot was a focal point in the social life of the community. Every evening, residents gathered to watch the Benson-Nogales train stop in Patagonia. The railroad brought jobs and workers to Patagonia, Sonoita, and Elgin. At one time, there were approximately 10,000 residents in the area due to the influx of miners and ranchers. (Linnéa Caproni)

PATAGONIA HISTORIC DISTRICT

Patagonia

(1896) Rollin Rice Richardson of the San Rafael Cattle Company, who had earlier purchased the San Rafael de la Zanja land grant, founded the town of Patagonia in 1896. The original mainstay of Patagonia was mining, and it became the local mining-community hub. Later, the arrival of the New Mexico and Arizona railway straight through Patagonia connected the town to the rest of America's train routes and made Patagonia an important commercial center in Santa Cruz County. The population increased, and hotels, boarding houses, an opera house, restaurants, and bars were established. However, after the end of ore shipment in 1960, and the subsequent closure of the rail line, Patagonia's boom days finished. Today, fine architectural examples of Patagonia's history remain: the historic 1900 depot (currently the town hall), Cady Hall (NRHP-listed; Henry O. Jaastad), and various historic residences and commercial buildings. (Linnéa Caproni)

PENNINGTON RURAL HISTORIC LANDSCAPE, NRHP

Approximately 2,000 feet north of junction of Royal Road and Calle del Rio Nogales

(1858) This National Register District conveys a pristine sense of Anglo-American pioneer agriculture and represents a cohesive rural historic landscape in southern Arizona after the acquisition of the area from Mexico. It includes a stone cabin, a field, an irrigation ditch, and an adobe ruin. The stone cabin is thought to be the oldest remaining house built by Anglo-Americans in Arizona. The field has been farmed almost continuously since 1858. The field is thought to have been irrigated by diverting the water from the Santa Cruz River into the ditch, which is no longer there, but that could be traced. The adobe ruin is thought to mark the former house of Albert Case Benedict, who was the third owner of the Pennington property. The property is associated with Elias Green Pennington, who was one of the first farmers along the upper Santa Cruz River, and his daughter, Larcena. (Andrew Gorski)

PIMA COUNTY COURTHOUSE (THIRD), NRHP

**115 North Church Avenue
Tucson**

(1929, Roy Place, architect; Herbert Brown, contractor; south wing addition by Blanton & Cole, architects; M. M. Sundt, contractor) The third Pima County Courthouse exemplifies Place's interpretation of the Spanish Colonial Revival style, defined by the space of the arcade and courtyard, as well as through the use of religious building forms and ornament, including a central dome and an elaborate portal facade. Moorish overtones, typical of this style, can be seen in the use of ceramic tiles on the wainscoting, courtyard fountain, and on the dome, whose mosaic form has become a Tucson icon. (Nequette and Jeffery 2002)

PIONEER HOTEL

**100 North Stone Avenue
Tucson**

(1928, Roy Place; remodeled in 1970, after fire) This 12-story building was at the center of the downtown business district and attracted the social and political elite. Since the hotel closed in 1974, the façade of the building has been clad, retaining only a corner spiral pilaster as the last remnant of the original façade. (Nequette and Jeffery 2002)

PISCORSKI, JOSÉ BUILDING, NRHP

**186-190 Morley Avenue
Nogales**

(pre-1906) Local businessman Joseph Piscorski built this building. The second floor was the location of the Nogales and Santa Cruz Board of Trade offices from 1906-1908; it then operated as the San Antonio House Hotel and Boarding House. The first floor storerooms have been occupied by various businesses since construction. It is the most well-preserved stone commercial building in Nogales, and still maintains the original storefront; it features an elaborate pressed metal cornice. (Andrew Gorski)

PRODUCERS COTTON GIN BUILDING

**13864 North Sandario Road
Marana**

Built in 1938, the Producer Cotton Gin comprises two buildings, an office and a warehouse. Both structures are simple, one-story structures made of adobe mud brick set over a poured concrete floor. The office includes cast-in-place concrete lintels over door and window openings, and the roof consists of 2- by 8-inch rick joist on 24-inch centers overlain by wooden board roof decking. The warehouse has a wood truss rick system, with a corrugated metal rick finish. Exterior features include three sheet metal-covered wood sliding doors with cast-in-place concrete frames. The Producer Cotton Gin represents the cotton growing industry, historically a driving force in the settlement of Marana, Arizona. (Dart and Jones 2001)

RANCHO LAS LOMAS

**4500 West Speedway Boulevard
Tucson**

(1936, Margaret Spencer) This rambling complex of cottages and towers was one of Spencer's few Tucson works. Originally designed as a guest ranch on 140 acres, each of the 13 buildings blends sensitively into the surrounding desert landscape and is constructed of native stone with windows strategically placed to frame views of the Tucson Mountains and its rolling foothills. (Nequette and Jeffery 2002)

REILLY FUNERAL HOME

**102 East Pennington Street
Tucson**

Reilly Undertaking Company was formed by John I. Reilly, who served on the State Board of Embalmers for 17 years (chairman for 2 years). In 1908, the building was designed and built by noted Tucson architect Henry Jaastad. The Neoclassical design was modernized in 1935 (by Jaastad) to the current Art Deco style. (Brooks Jeffery)

REX RANCH

**131 Amado Montosa Road
Amado**

(1880s) This 50-acre guest ranch is located on part of the historic Canoa Spanish Land Grant, near the town of Amado. In 1938, Rex Hamaker of Houston, seeking a healthy, restful climate away from the city, purchased the property and founded the Rex Ranch resort. Historically, celebrities in Arizona for filmmaking and privacy and relaxation stayed at the private Rex Ranch and contributed to its success. Some buildings on the resort property predate the Hamaker period – specifically, the original double-adobe building built by a cavalry soldier who was gifted the ranch property upon his retirement from the United States Army. The Rex Ranch restaurant, Cantina Romántica, is housed in this original structure. Another building of note is the mid-1900s two-story adobe structure designed by architect Josias Joesler. The Rex Ranch property possesses the first swimming pool built in Santa Cruz County. (Linnéa Caproni)

RIALTO THEATER AND APARTMENTS

300-314 (318-322) East Congress Street

Tucson

(1919; partially demolished) The original theater once had an incredibly elaborate interior in which all surfaces are ornamented with plasterwork and painted in decoration of Islamic character. The theater originally had 1,300 seats, now all removed, and a stage that was unusually large. The second-floor apartments are still in use, and the theater is occasionally used for informal parties, performances, and concerts. (Nequette and Jeffery 2002)

RINCON MARKET, NRHP

Sam Hughes

2502-2518 East 6th Street

Tucson

(1945, attributed to Merritt Starkweather, FAIA; renovation, 1986, by Paul Weiner, Bob Lanning, and John Collins) This brick building, with parking behind and on the eastern side, has a wonderful interior space with exposed trusses that were opened up with steel beams and columns in the 1986 renovation. The continuous porch along the southern wall includes seating, and meets the sidewalk at the property line. (Nequette and Jeffery 2002)

ROBLES RANCH

Robles Junction Three Points on Ajo Highway 86

This famous ranch complex was first established by Bernabe Robles in the 1880s, when he ran a stage line from Tucson to Quijota. An adobe stage station/ranch house was constructed sometime between 1880-1884. At one time, the ranch encompassed more than 1 million acres between Florence and the Mexican border. The original buildings were single-story adobe structures built in the vernacular Sonoran style of the time, with a separate open space or breezeway between them. In the 1950s, these were joined, and additional improvements were made to the property. The ranch house is currently characterized by Territorial style forms and details. Pima County has purchased the property and is in the process of renovating it as a community center for Three Points. (Gerald A. Doyle & Associates 1999)

ROCKWELL HOUSE, NRHP

El Presidio

405 West Franklin Street

Tucson

(1907-1908, Holmes & Holmes) This residence represents the English Tudor style, with the first story in brick and the second contrasting dark wood half timbering with light colored stucco. The house was designed from the interior out, without regard for the irregular forms on the exterior. (Nequette and Jeffery 2002)

ROMERO HOUSE, NRHP
El Presidio
104-108 West Washington
Tucson

(circa 1868) Based on skewed alignment of this building with the modern street, construction materials, and methods, it may embody a portion of the original presidio wall; otherwise, a typical transformed Sonoran rowhouse with a pitched roof. It is currently being used by the Tucson Museum of Art. (Nequette and Jeffery 2002)

RONSTADT HOUSE, NRHP
607 North 6th Avenue
Tucson

(1904, Trost & Rust; renovated, 1977, by David Goff) Built on a double lot for Fred and Lupe Ronstadt, the most striking feature of the large two-story stucco house is the entry, consisting of a protruding flat slab roof sheltering a second-story balcony above the porch. On the ground floor, the house is made of nine squares – that is, three rooms wide by three rooms deep. In contrast, the upper floors become a cruciform as the central area extends to the balconies. (Marty McCune)

RONSTADT-SIMS ADOBE WAREHOUSE, NRHP
911 North 13th Avenue
Tucson

This large adobe warehouse was constructed in 1913, by Richard Ronstadt, as an expansion of his agricultural implement business. The interior has 18-ft-high adobe walls, with a roof of long-span timber Howe trusses. It is an exceptional example of warehouse construction, both an engineering feat of its time and an unusual application of mixed Anglo and Sonoran forms to a commercial building. (Marty McCune)

ROSKRUGE HOUSE, NRHP
Armory Park
318 East 13th Street
Tucson

(1895-1896, Creighton & Millard/James M. Creighton) Designed by the architect of Old Main on the University of Arizona campus and the Pinal County Courthouse in Florence, Arizona, an interior visit to this Queen Anne house is necessary to appreciate the informality and dynamic space created by the diagonal walls, octagonal spaces, and bay windows. (Nequette and Jeffery 2002)

ROSKRUGE SCHOOL
501 East 6th Street
Tucson

Roskruge School, located at 501 East Sixth Street, opened in 1907, as Tucson's first high school. It was named after George James Roskruge, an Englishman who worked as a surveyor, city engineer, school administrator, and president of the Tucson Building and Loan Association. In 1923, when Tucson High School opened a campus at 400 North Second Street, Roskruge served for a time as a junior high school. The school has, at times since, served as an elementary school for as many as 300 pupils. Today, it has a combined use as a school for children from kindergarten through eighth grade and as a center for bilingual magnet programs for middle school students. (Jerry Kyle)

SACRED HEART CHURCH
272 North Rodriguez Street
Nogales

(1897) Sacred Heart Parish has served the Catholic Community in Nogales since 1897. Its inauguration occurred on Thanksgiving Day of 1928, after a construction period of two years. (Andrew Gorski)

SAFFORD MIDDLE SCHOOL
200 East 13th Street
Tucson

(1918, Henry Jaastad/ Annie Rockfellow, designer) Sitting on the site of the old Plaza School that was destroyed by fire, this structure is arguably the best surviving example of the work of Annie Rockfellow, and her belief that the Spanish Colonial Revival was an appropriate architectural style for the Southwest. (Nequette and Jeffery 2002)

SALERO MINING GHOST TOWN (HACIENDA DEL SANTA RITA)
Sonoita/Patagonia

(Seventeenth century) The Salero Mine was first worked for its silver by Jesuits in the seventeenth century, making it one of the oldest mines in southern Arizona. The name Salero means saltcellar (shaker) in Spanish and refers to a visiting Spanish bishop who was presented with a silver saltshaker. American possession began in 1857, with acquisition of the mine by the Santa Rita Mining Company of Tubac. Salero became the mining headquarters for the company. Several famous persons are associated with the mining company: Sam Colt of the Colt revolver, Charles Debrille Poston (Father of Arizona), Frederick Bronckhow and Heintzelman (successful German miners), and William Wrightson (famous local figure during the mining boom era). Between 1860 and 1861, mining operations at Salero prospered. However, they were prematurely interrupted when local Apaches massacred most of the Hacienda's founders. The community of Salero relocated nearby and eventually acquired a post office. Purportedly, the ruins of several original buildings still exist; however, they are on the private property of ASARCO, Inc., and not accessible to the public. (Linnéa Caproni)

SAM HUGHES SCHOOL, NRHP

Sam Hughes

700 North Wilson Avenue

Tucson

The school was designed by prominent architect Roy Place and built in 1927. The school is a one-story doughnut plan, with a central courtyard anchored by a two-story office area centered in the main street façade. The front has a gabled mission tile roof, with a gabled-roofed tower projecting from the left front corner and a large deeply recessed arch centered in the wall containing the entry doors. The covered walkways are framed with hewn heavy timber and large corbels. The building has many other beautiful architectural features and has remained largely unmodified. (Marty McCune)

SAMANIEGO HOUSE

222 South Church Avenue

Tucson

The Samaniego House was built in 1876, by Mariano Samaniego, and is virtually all that remains of the barrio that was destroyed during urban renewal in the 1960s. It is adobe with saguaro rib ceilings. Samaniego was a very prominent citizen of Tucson, serving on the city council, as County Assessor, on the board of supervisors, and delegate to five territorial legislatures. He was a regent of the University of Arizona, president of the Arizona Pioneers Historical Society, and co-founder of the Alianza Hispano-American Club. (Marty McCune)

SAN PEDRO CHAPEL, NRHP

5230 East Fort Lowell Road

Tucson

(1932, attributed to Alonso Hubbard, architect/contractor; renovation, 1995, by Bob Vint) In 1931, the village of El Fuerte commissioned the third chapel for this site. It was built by the residents, using earth from the site, and is significant as a contextual remnant of the older neighborhood. (Nequette and Jeffery 2002)

SAN RAFAEL STATE PARK

23 miles southeast of Patagonia

(1900) San Rafael State Park is part of the original 1825 Spanish San Rafael de la Zanja land grant. The historic ranch house was built in 1900, by cattle rancher Colin Cameron, and later acquired by William Greene of Tombstone in 1903. It was the fourth ranch headquarters since 1884. This house is considered the best-preserved brick ranch house in Arizona from the Territorial period of 1863-1912. The house is two stories high and contains 30 rooms with a full basement. The truncated hipped roof covers a wide veranda around the entire ground floor, and the edge is supported by delicate colonnettes, square at the top and bottom. The veranda rests upon brick pillars and is raised above ground level, allowing light to the windows of the basement rooms. The house and setting have been used in several movies, including the 1955 Rogers and Hammerstein movie *Oklahoma* and the John Wayne movie *McClintock*. (Andrew Gorski)

SAN XAVIER DEL BAC, NRHP, NHL
Mission Road
Tucson

(1783-1797, Ignacio Gaona, master builder; restorations, 1906, Henry Grajon; 1937-1951, E. D. Herreras, FAIA; and 1988, Patronato de San Xavier, Italian conservation team led by Bob Vint) This mission church remains one of the finest examples of Spanish Colonial architecture in the United States. The attraction of San Xavier begins with the image of a massive, but beautifully proportioned and articulated structure of brilliant white seen against the brilliant colors of an endless desert. San Xavier is characteristic of the Spanish Colonial missions, in that it is a provincial adaptation of the late Baroque designs of Mexico, although in this case, it is also stylistically 50 years behind. (Nequette and Jeffery 2002)

SANTA CATALINA APARTMENTS (UDALL CENTER)
803-811 East 1st Street
Tucson

(circa 1910) Originally built as boarding houses, these two freestanding stuccoed brick structures have gabled roofs supported by slender wooden posts at the perimeter, creating a continuous porch on all four sides of each structure. Segmental arches form the tops of numerous exterior doors and windows, typical of this early residential type. (Nequette and Jeffery 2002)

SANTA CRUZ BRIDGE NO. 1, NRHP
South River Road over the Santa Cruz River
Nogales-Patagonia Highway

(1917) Santa Cruz Bridge No. 1 is noteworthy for the pattern of events contributing to the history of the state and its communities, for the structural design that embodies the type and method of bridge construction and architecture, and for the information the bridge is likely to yield from the history of the community. In 1866, state legislatures began to transfer road construction and administration to counties. Counties were divided into road districts and authorized to oversee the funding of road construction and maintenance. In 1915, the Arizona State Legislature appropriated \$12,500 from the state's General Fund for a bridge over the Santa Cruz River on the Nogales-Patagonia Highway. State Engineer B. M. Atwood located a site and waited for the appropriation of equal contributions from Santa Cruz County. In 1917, at a cost of \$38,012, under the direction of General Foreman F. W. Haynes, the Santa Cruz Bridge No. 1 was completed. The bridge is an exemplar of excellent workmanship, it is unique for its unusual three two-girder channel construction, and it is the earliest and longest-span concrete girder bridge still in use on Arizona's road system. (Linnéa Caproni)

SANTA CRUZ CHURCH, NRHP
1220 South 6th Avenue
Tucson

(1919, Manuel G. Florez, contractor) In 1916, Henry Grajon, the second bishop of the Diocese of Tucson, drew up plans for a monastery for Carmelite friars, based on a convent in Avila, Spain. The adobe blocks for this enormous structure were made by the Papago (Tohono O'odham) living near the Mission San Xavier at a cost of \$10.00 per 2,000. It is the largest adobe structure in this area. (Nequette and Jeffery 2002)

SANTA CRUZ COUNTY COURTHOUSE, NRHP
Intersection of Court Street/Morley Avenue
Nogales

(1904) This three-story structure constructed of rough, coursed stone is situated on a steeply sloping site at the base of the Marsh Heights Historic Residential District. A dominant, centrally located dome rests upon a modified cruciform plan that is accessed from the street by a terraced lawn with a monumental central stairs. The prominent portico has four simple columns topped with a boxed decorated cornice and frieze. A highly decorated pediment and cornice topped with urns is also featured. (Andrew Gorski)

SANTA CRUZ SCHOOL HOUSE
Duquesne Road
State Route 82 northeast of Nogales

(1920s) This is one of the approximately two dozen Little Red School Houses built in the Santa Cruz Valley area in the 1920s. Despite difficulties in the cattle industry during that time, a sufficient population of farmers and ranchers existed for construction of these schoolhouses. (Linnéa Caproni)

SCOTTISH RITE TEMPLE BUILDING, NRHP
Armory Park
160 South Scott Avenue
Tucson

(1915, Trost & Trost/Henry Trost, designer; restoration, 1990, by Bob Vint) A surprising variety of Neoclassical stylistic influences are combined in this Masonic temple. The symmetrical exterior façade of brick and terra cotta meshes the large scale of the Roman Revival with a restrained Greek Revival ornament, seen in the Ionic capitals. (Nequette and Jeffery 2002)

SECOND OWL'S CLUB, NRHP

El Presidio

378 North Main Avenue

Tucson

(1902-1903, Trost & Rust) Designed as a larger facility for this fraternal organization, this massive two-story building is an eclectic mix of Mission Revival forms and Sullivanesque ornament. Trost incorporated playful references to local architecture, including the immense, oversized canales, typical of the Sonoran rowhouses, a sculpted facade, reminiscent of that of San Xavier, and local flora and fauna. (Nequette and Jeffery 2002)

SOLOMON WARNER HOUSE AND MILL, NRHP

350 South Grande Avenue

Tucson

One of Tucson's enterprising pioneers, Solomon Warner, directed construction of a residence and stone flourmill at the base of A-Mountain in 1874. He was given permission by Bishop Salpointe to construct a canal across the wheel. In addition to the mill and canal, a 50-acre lake was created by building an earthen dam at the confluence of the Santa Cruz River and the west branch to create a millpond. The mill operated from 1874 to about 1890, when floods destroyed the land and millrace. The old mill was abandoned and destroyed in the 1930s. The house, a one-story adobe built in the vernacular Sonoran architectural style, is occupied as a private residence today. (Pima County 1999)

SOUTH HALL, NRHP

University of Arizona

Tucson

South Hall, originally called Arizona Hall, was designed by prolific Tucson architect David Holmes and completed in 1913. This two-story brick men's dormitory building is a modest expression of the Classical Revival style, distinguished from other university buildings in that style, such as Herring Hall. These elements include a hipped roof entry portico in place of the formal temple front, square brick piers, not the traditional monolithic round columns, and limited brick ornamentation. The plan is U-shaped, with an intimate courtyard facing south. It allows the sun to warm the rooms in the winter, while a graceful jacaranda tree shades the rooms in the summer. (Nequette and Jeffery 2002)

**SOUTHERN PACIFIC RAILROAD DEPOT AND ASSOCIATED BUILDINGS, NRHP
WAREHOUSE**

342 East Toole Avenue

Tucson

The station was commissioned in 1905, due to high passenger volume/demand, and was finished in 1907. It was remodeled and modernized in 1942, with the removal of all Spanish Colonial Revival elements; outbuildings retained their original architectural integrity. (Brooks Jeffery)

ST. AUGUSTINE CATHEDRAL
192 South Stone Avenue
Tucson

(1896, Quintus Monier, architect; façade remodeled, 1929, Henry O. Jaastad and E. D. Herreras; interior remodeling, 1968) This second Catholic Church in Tucson with this name was built under the auspices of Father Peter Bourgade, Bishop of Tucson, in the Romanesque Revival style usually favored by French priests. In 1929, the exterior was changed to reflect the then-popular Spanish Colonial Revival style, and in 1968, a major interior remodeling completely changed the character of the interior space. (Marty McCune)

ST. JOSEPH'S/IMMACULATE HEART ACADEMY, NRHP
Armory Park
35 East 15th Street
Tucson

(1886) One of the largest surviving structures from this date, this two-story building is badly in need of restoration. The original building served as a convent, and the addition housed the first Catholic school in Tucson. The first story is constructed of hand-hewn, rough cut stone from A-Mountain, and the second story is stuccoed over brick. (Nequette and Jeffery 2002)

ST. MICHAEL'S AND ALL ANGELS
602 North Wilmot Road
Tucson

(1953, Josias Joesler; addition, 1964, by Gordon Lupeke & Ed Moore; renovations, 1991, Bob Vint) The form and materials of the Pueblo Revival church were inspired by the 1760 Mission San Jose in Trampas, New Mexico. Joesler used weathered materials to make the building look older, but it is the integration of building and arcades with courtyards, shade trees, benches, and fountains that is noteworthy. (Nequette and Jeffery 2002)

ST. PHILLIPS IN THE HILLS EPISCOPAL CHURCH
4400 North Campbell Avenue
Tucson

(1936, Josias Joesler; addition, 1957, Gordon Luepke; addition, 1998, by Cain Nelson Wares Cook/Ned Nelson, FAIA) This complex was designed as part of a group of buildings surrounding a park, meant to mimic a Mexican village center and provide an anchor for the development of the Catalina Foothills Estates. Unfortunately, conditions have changed dramatically, and what was once a quiet park is now the crossroads of high-speed, high-volume arteries of River Road and Campbell Avenue. (Nequette and Jeffery 2002)

STEINFELD HOUSE/FIRST OWL'S CLUB

El Presidio

300 North Main Avenue

Tucson

(1898, Henry Trost; renovation, 1978, by Gresham/Larson Associates) Designed as a residence for 13 bachelors who comprised the original Owl's Club, this two-story building reveals Trost's stylistic preference for combining Mission Revival forms, including tiled roofs and an arched portico with Sullivanesque ornament. The sensitive renovation in 1978 earned the architectural firm a design award. (Nequette and Jeffery 2002)

STEWARD OBSERVATORY, NRHP

University of Arizona

Tucson

(1921-1923, Lyman & Place) Built on the highest point of the university's flat mesa to accommodate the 36-inch reflecting telescope, the white terra cotta tile exterior reflects heat and keeps the instruments inside cool. A Classical Revival expression can be seen in the use of implied pilasters and an entablature on this small octagonal building. The dome itself was designed by Godfrey Sykes. (Nequette and Jeffery 2002)

STILLWELL-TWIGGS HOUSE

134 South 5th Avenue

Tucson

(1901-1902) This two-story brick house was the former Twiggs boarding house used by railroad employees, winter visitors, and businessmen until the 1930s. The front porch and verandah, which runs the length of the house, was used by guests, and each room had its own wood stove. (Nequette and Jeffery 2002)

STONE ASHLEY

6400 East El Dorado Circle

Tucson

(circa 1930, Grovner Attabury) Originally built as a house for Florence Pond on her 320-acre estate, arrival is made along an alley of mature Italian cypresses, which reinforces the fusion of building and landscape architecture. The stone structure is several stories high, and takes advantage of the steep slope by providing a sunken garden in the Italian Renaissance style. (Nequette and Jeffery 2002)

STONE AVENUE TEMPLE (TEMPLE EMMANU-EL)

Barrio Libre

564 North Stone Avenue

Tucson

(1910) The façade of the first synagogue in the Arizona territory is an odd combination of a central Greek temple front, flanked by towers with Moorish domes. The façade was originally exposed brick, so the effect was less Moorish than today. The most curious feature is the raised base, with entry through stairs at either side tower, not in the center. (Nequette and Jeffery 2002)

TELLES BLOCK (OLD TOWN ARTISANS), NRHP

El Presidio District

Tucson

(1850s-1960s) The entire block between Washington Street and Telles Street, and Meyer Avenue and Court Avenue, is defined by Sonoran rowhouses with only a small gap created by missing structures at the northeastern corner. This well-defined block creates an intimate, colorful, and shaded courtyard. Benches, a fountain, and shade trees make it one of the most appealing courtyards in Tucson. (Nequette and Jeffery 2002)

TELLES GROTTTO SHRINE

State Route 82 southwest of Patagonia, Milepost 15.9

(1940s) This religious roadside shrine was carved into a solid rock cliff face after World War II. During the war, the Juan Telles family had five sons in military service. Mrs. Telles vowed that if all five of her sons returned safely from the war, she would construct a shrine devoted to the family's patron saint. The existence of this shrine represents the return of all five of the Telles sons and their mother's subsequent expression of devotion. (Linnéa Caproni)

TEMPLE OF MUSIC AND ART, NRHP

Armory Park

330 South Scott Avenue

Tucson

(1927, Arthur W. Hawes; renovation, 1990, Janus & Associates, architect; Division II, contractor) The open side of the U-shaped plan of this Spanish Colonial Revival structure faces the street, creating an inviting courtyard paved in Mexican tile and featuring a fountain. The temple is very similar to the design of the Pasadena Community Playhouse in California. (Nequette and Jeffery 2002)

THREE MEDITERRANEAN COTTAGES, NRHP

141 and 147 Pajarito, 533 Potrero

Nogales

(1920s-1930s) This project is the best example of Mediterranean style cottages in Nogales. Reflective of the Period Revival styles reintroduced in the late 1920s and early 1930s, it is a rare example of adobe from this time period. The buildings are symbolic of population growth in Nogales during the post-World War I years. (Andrew Gorski)

TOHONO CHUL PARK

7366 North Paseo del Norte

Tucson

(Dedicated in 1985) Truly a desert island in the middle of suburban development, the land of this 49-acre park was inhabited by the Hohokam from A.D. 70-1150, served as a cattle ranch and homestead in the 1920s, enjoyed the view of a citrus grove to the south, and was a winter home to many families. Today, the park includes an exhibit house, tea room, demonstration gardens, classrooms, trails, ramadas, and many excellent examples of minimal water use and living in the desert. (Nequette and Jeffery 2002)

TUBAC GOLF RESORT

Tubac

(1789) The Tubac Golf Resort lies on the site of the former historic Rancho Otero near Tubac. Don Toribio de Otero of northern Sonora received the first land grant in the Arizona Territory [Pimería Alta] from the king of Spain in 1789. The first deed of the Otero ranch dates to 1810, and the Otero family occupied the property until the 1860s, when they left due to Confederate occupation and Apache hostilities. However, in 1867, Don Otero's grandson, Sabino, returned, and with the help of his son Manuel, built a cattle empire that stretched from the Santa Rita Mountains to the Baboquivaris and from the Santa Catalinas down into Mexico. The last Otero to own the vast Otero properties, Teofilo, died in 1941. In 1959, the Otero ranch property was purchased by singer/actor Bing Crosby and other businessmen who founded the Tubac Golf Resort. Historic buildings on the 500-acre property showcase the engineering/architecture of the Spanish Colonial period. These include the early 1800s remodel of the original Otero family hacienda just north of the Stables Bar and Grill, now meeting rooms and a honeymoon suite, and the old stables, hayloft, and bunkhouse, now the restaurant, lounge, and business office. (Linnéa Caproni)

TUBAC PRESIDIO, NRHP
El Presidio Real de San Ignacio de Tubac
San Rafael de Tubac

(Late 1750s) The Tubac Presidio is the oldest Spanish military outpost in Arizona, built prior to 1760, to defend against local Indian uprisings. Only low mounds outline the original building today, and its original adobe bricks, used to build houses in the Tubac area, are long gone. The site is significant, however, because the fort's existence corresponds directly with the early development of Tubac. The Presidio indirectly altered the cultural landscape of southern Arizona, and even that of the San Francisco Bay Area, through Juan Bautista de Anza, the presidio's first commander and leader of a group from Tubac that founded San Francisco. (Linnéa Caproni)

TUBAC TOWNSITE HISTORIC DISTRICT, NRHP
Roughly bounded by Tubac Road and Plaza Road and Presidio Drive

(Post-1857) The Tubac Townsite Historic District contains 21 contributing and four non-contributing historic buildings. These showcase the following styles of architecture: Adobe Row House of the Pimería Alta, Neo-colonial Revival, and Pueblo Revival. Construction of buildings occurred after 1857. By that time, the Tubac Presidio was in ruins. Therefore, the buildings of this district are related to the 1870s reoccupation boom in Tubac during the American Settlement period rather than the Spanish Colonial period when the Tubac Presidio was the force in town development. In addition to historic buildings, the district boundaries encompass two excavated archaeological sites: Presidio Ruin and Otero House. (Linnéa Caproni)

TUCSON HIGH SCHOOL AND VOCATIONAL EDUCATION BUILDING
400 North 2nd Avenue
Tucson

(1924, Lyman & Place/Henry Jaastad, Associate) Monumental and truly civic in scale, the original building for 1,500 students is Neoclassical in style. The vocational building (1948-1949, Place & Place) is a great example of the Streamline Moderne style. (Nequette and Jeffery 2002)

TUCSON MOUNTAIN PARK (BUILDINGS)
Gates Pass

(1933-1942, Clinton F. Rose, landscape architect) The enormous park that follows the ridge line of the Tucson Mountains was developed by Pima County and the National Park Service, with the help of the Works Progress Administration, in the 1930s. This historic landscape embodies a singular design ethic, incorporating historic structures, prehistoric archaeological and rock art sites, mines, features of the natural environment, topography, views, and new structures such as roads, trails, parking areas, and picnic ramadas. (Nequette and Jeffery 2002)

TUMACÁCORI MUSEUM, TUMACÁCORI NATIONAL MONUMENT, NRHP, NHL, NHP

18 miles north of Nogales on Interstate 19

(1937-39) The Tumacácori Museum/Visitor Center was built between 1937 and 1939, as an interpretive tool for the Tumacácori Mission complex history. However, the museum is an exhibit in itself. National Park Service staff researched the architectural elements of the Sonoran missions, and the museum architects then incorporated the findings into the Tumacácori Museum building design. Those architectural elements include construction materials, design motifs, and a groin-vault ceiling – all similar to those in the Sonoran missions. As a result, the adobe Tumacácori Museum building is a fine example of Mission Revival architecture, a style popular in the American Southwest at the time of its construction. (Linnéa Caproni)

TUMACÁCORI NATIONAL HISTORICAL PARK, NRHP

18 miles north of Nogales on Interstate 19

(1757) The Tumacácori National Historical Park preserves one of the oldest Spanish missions of the Greater Southwest: the Tumacácori Mission. The mission and its surrounding historic district are all historically significant as visual representations of the history of the Spanish frontier in New Spain and the development of the mission site since 1757. The archaeological remains in the district are also significant for their potential to yield further information on that development. The Tumacácori Mission also reflects the Spanish Mission architecture that influenced American Revival Mission architecture in the early 1900s, an influence seen in the later buildings of the historic district. (Linnéa Caproni)

UNITED STATES COURTHOUSE, NRHP

55 East Broadway Boulevard

Tucson

(1929, James A. Wetmore, United States Department of the Treasury) Originally built as a ground-floor post office with courtrooms on the second floor, the restrained Neoclassical style here is apparent. (Nequette and Jeffery 2002)

UNITED STATES CUSTOMS HOUSE

Terrace Street/International Street

Nogales

(1935) This building is prominently located at the United States/Mexico border and is associated with the United States Customs Service and the prominent federal architect, Louis A. Simon. It is symbolic of the important role of Nogales as the primary port of entry from Mexico along the Arizona border. It is an excellent example of the Federal Architecture Period Revival style and features a unique cornice. (Andrew Gorski)

**UNITED STATES POST OFFICE AND IMMIGRATION STATION, NOGALES MAIN,
NRHP
Hudgin/Morley Avenue
Nogales**

(1923) Constructed in 1923, during Nogales' most significant period of growth, the Nogales Main Post Office is one of only six post offices constructed in the western region between 1920 and 1926. A rectangular building designed in an extremely simplified version of the Spanish Colonial Revival style, the structure's only ornament is at the main entrance, and consists of two slender columns supporting an entablature over which two eagles are placed. (Andrew Gorski)

**VALLEY NATIONAL BANK (BANK ONE)
2-16 East Congress Street
Tucson**

Tucson's first skyscraper, the building opened in 1929. It was considered to be "The daddy of Tucson's skyline." Aspects of the building are: second Renaissance Revival style, rose and cedar colored Tennessee marble interior, and hand-painted murals of the coming of the mission padres that decorated the walls. (Brooks Jeffery)

**VELASCO HOUSE, NRHP
475 South Stone Avenue
Tucson**

(circa 1850s; addition(s) 1860-1890) This house is an excellent example of a Transformed Sonoran structure in which the earlier simple adobe with its zaguan, not only lost its adjacent neighbors, but was changed in form and detail. (Nequette and Jeffery 2002)

**VERDUGO HOUSE, NRHP
El Presidio
317-325 North Main Avenue
Tucson**

(1877) This especially handsome Transformed Sonoran house sits high above the street with steps leading to each entry. At the base, built to accommodate the sloped site, is what appears to be a solid stone foundation wall. The color scheme is contemporary — the deep earthen tone of the stucco walls is complemented by the brilliant colors on the Greek Revival trim on the windows and doors. (Nequette and Jeffery 2002)

VETERAN'S HOSPITAL
3601 South 6th Avenue
Tucson

(1929, Roy Place) The original gracious campus plan, with its blend of native and exotic landscaping and beautiful open spaces, was the perfect setting for the Spanish Colonial Revival buildings in pink stucco and bright accents, forming shady arcades and cool courtyards. (Nequette and Jeffery 2002)

WASHINGTON CAMP/DUQUESNE GHOST MINING TOWNS
Patagonia area

(1880s) These twin mining settlements of the Patagonia mining district prospered during the mining boom era of 1880-1920, and averaged a population count of 1,000 each. Washington Camp, which developed around the Pride of the West Mine, was the major supply community for Duquesne, as well as the nearby mining communities of Harshaw and Mowry. Harshaw provided housing and a general store while Duquesne boasted a company office and post office. A shared community schoolhouse was halfway between the two settlements. The remains of these old settlements include adobe-building ruins, a mineshaft, and mining equipment. (Linnéa Caproni)

WELLS FARGO (FIRST INTERSTATE) BANK BUILDING
150 North Stone Avenue
Tucson

The Wells Fargo building was built in 1955, and designed by Place and Place architects. This building has an Italian Renaissance revival façade. From the early Renaissance comes the arcade of seven arches on slender columns rising two stories from the single-story base. There is ornamental ironwork on the balcony. The lobby murals about Tucson's history are by Jay Datus. (Marty McCune)

WISDOM CAFE
1931 East Frontage Road
Tumacácori

(1944) Quoting from a 2001 brochure printed by the Nogales Chamber of Commerce: "Serving customers along Old Nogales Highway since 1944, the Wisdoms have seen their share of stars like John Wayne, years ago, and Diane Keaton who stopped in for lunch today. It is also a haunt for sports hall-of-famers like basketball's Kareem Abdul Jabar, football's Dick Bass, and baseball's Johnny Bench. Written up across the country in publications such as the *Saturday Evening Post* and *New York Times*, it is a must see on your visit to Santa Cruz County." (Linnéa Caproni)

WISE, J. E. BUILDING, NRHP
87 North Grand Avenue
Nogales

(1918) This building houses the oldest continually operated newspaper and printing establishment in Nogales. Since 1918, it has been associated with the *Nogales Herald*, whose publisher, Hanson Ray Sisk, published the paper (1920-1969) longer than any other publisher in the state. This building relates to the twentieth century commercial development of Arroyo Boulevard and features a unique curved glass block storefront. (Andrew Gorski)

WOOLWORTH, F. L. (W.) & CO. BUILDING, NRHP
115-117 Morley Avenue
Nogales

This is the only Neo-Classical Revival Commercial Building in Nogales; it is also the only terra cotta façade in Nogales. The building remains in excellent condition. (Andrew Gorski)

WORLD'S FAIR MINE
Near Harshaw, Patagonia Mountains

(1884) The World's Fair Mine was one of the most prosperous mines in the Patagonia Mountains. By the late 1880s, it had produced several millions of dollars in silver, lead, gold, and copper. Frank Powers of Harshaw bought the World's Fair Mine for \$150 around 1884, and by 1898, he was offered \$500,000, which he refused. According to author Alma Ready, Powers just dug in to the mine's ore whenever he desired a vacation. Today, there are major mining and stamp mill ruins at the mine site. (Linnéa Caproni)

WORLD WAR II HANGARS/TRIPLE HANGAR
Tucson International Airport

(1944, Consolidated-Vultee Aircraft Corporation) The three hangars, located on the west ramp of the Tucson International Airport (formerly Tucson Municipal Airport), were constructed to perform modifications to B-24 and B-32 aircraft during World War II. When the hangars were constructed, they encompassed the largest span for wooden trusses ever made. After World War II, various government contractors used the hangars to perform aircraft modifications and maintenance. Hangar One served as the passenger terminal for Tucson Municipal Airport from 1948 through 1963; since 1970, the hangars have been leased by the Tucson Industrial Center to businesses such as general aircraft and vehicle maintenance and charter services. (Jonathan Mabry)

WRIGHT-ZELLWEGER HOUSE

El Presidio

288 North Church Avenue

Tucson

(1900) Tucson's best interpretation of the Neo-Classical style, in which its flat roof carries a balustrade with finials. During restoration, the original clapboard siding of painted redwood was discovered under a layer of stucco. (Nequette and Jeffery 2002)

YUMA HALL, NRHP

University of Arizona

Tucson

(1937, Roy Place/J. J. Garfield, contractor) Completed a few months before Gila Hall, Yuma Hall is identical in size and floor plan, but of a very different exterior expression. There is an interesting mix of Italian Romanesque Revival elements, with other elements such as the Renaissance Paladin window over the entrance. Yuma Hall was built on the site of a smaller dorm, dating from 1907 by Henry Jaastad. (Nequette and Jeffery 2002)

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Appendix B

DESCRIPTIONS OF IMPORTANT ARCHAEOLOGICAL SITES

This list of some of the most important archaeological sites within the proposed Santa Cruz Valley National Heritage Area includes: (1) selected sites currently listed on the National and State Registers of Historic Places; (2) selected sites that are unlisted but that are likely eligible for inclusion in the National and State Registers; and (3) selected sites with local significance. The sites in Pima County were identified in 2002 as Priority Archaeological Sites for the cultural resources element of the Sonoran Desert Conservation Plan (Pima County 2002). The sites in Santa Cruz County were identified in a 2004 inventory conducted for this feasibility study by the Center for Desert Archaeology. This combined list does not include every site currently listed on the National and State Registers. It is a small sample of the archaeological sites with national, state, and local significance in this region, and it can be expanded in the future.

49ER'S

The 49er's site, BB:14:17, is one of several important prehistoric and historic period settlements along Tanque Verde Creek in the northeastern part of the Tucson Basin. It is a Hohokam village occupied from the late Sedentary to the early Classic period (A.D. 1100-1300), with remains of an adobe-walled compound surrounded by a more dispersed pre-Classic period (A.D. 750-1150) Hohokam community. Other evidence suggests an Early Ceramic period (A.D. 100-650) occupation. The remains of Anglo-American and Mexican homesteads (A.D. 1873-1922) associated with the old settlement of Tanque Verde are also present on the site. The site later became the home of the nationally renowned Evans School (1922-1943) and the 49ers Ranch and Country Club (1943-present). Most of the historic buildings were destroyed, although historic-period foundations and refuse deposits remain. (Carla Van West)

AGUA CALIENTE RANCH

BB:10:25, Agua Caliente Ranch, is the archaeological site associated with the historic Agua Caliente Ranch complex that was settled during the Territorial period in the early 1870s, and that is now a part of the Roy P. Drachman Agua Caliente Park owned by Pima County. The ranch was situated next to perennial springs that have attracted people to its waters for millennia and is one of the earliest Euro-American habitations in the eastern Tucson Basin. It has been used variously as a ranch, resort, homesite, and county park. Trash deposits dating

Notes:

- (1) Site numbers begin with "AZ" and end with "ASM" to indicate they are recorded in Arizona at the Arizona State Museum; these have been dropped from the site numbers for ease in reference.
- (2) Edited contributions by individuals are attributed by their full name; written source materials from publications are attributed by last name of the author(s) and publication date.
- (3) NHL indicates the property is listed as a National Historic Landmark.
- (4) NRHP indicates the property is listed on the National Register of Historic Places and the State Register of Historic Places.

between the 1880s and the 1940s were recorded near the ranch in the 1960s. Archaeological testing in the mid-1990s revealed multiple historic features, as well as prehistoric deposits associated with the Whiptail site (BB:10:3). The historic deposits included trash middens, a privy, the remains of a burned structure, segments of adobe walls, and an assortment of metal, ceramic, glass, and wooden artifacts. Although the site is heavily disturbed, there are likely to be historically and archaeologically valuable deposits at the ranch that could inform on the history of its use over the last 128 years. (David Cushman; Wellman et al. 1998)

AZ EE:6:12 (ASM)

This is an upland site located on the grassy terraces of Sonoita Creek. Survey noted both red-on-brown and black-on-white ceramics in the medium-density trash. These would suggest a late occupation, perhaps A.D. 1100-1300. Very few sites of this or any time period have been investigated in this ecotone. (Bill Robinson)

BLACK SHEEP CAVE

The Black Sheep Cave site, AA:16:16, is a small cave located in the Tucson Mountains that features rare examples of prehistoric pictographs on the walls. Fourteen figures of horned animals – including big horn sheep, deer, and antelope, along with several abstract designs – are found on the cave walls painted with a black pigment. Painting, as opposed to pecking, abrading, or scratching, the surface of rock is unique to the Hohokam in the Tucson basin, making the cave important as a single expression of this form of prehistoric rock art. Although not conclusively determined, Hohokam people probably created the images. The cave was first recorded in 1959, and was revisited by the Arizona Archaeological and Historical Society in 1981. (David Cushman; Hartman 1985)

BOJÓRQUEZ-AGUIRRE RANCH SITE

AA:12:122, the Bojórquez-Aguirre Ranch site, now within the Marana town limits near Silverbell and Cortaro roads, is one of Pima County's last remaining examples of Territorial period Mexican ranches. It was founded around 1877, by Juan and María Bojórquez, sold to Leandro Ruiz and Feliberto Aguirre in 1895, and abandoned about 1900. The Bojórquez ranch house excavated by Old Pueblo Archaeology Center in 1999, will be destroyed during the realignment of Silverbell Road. A stone house foundation, an adobe house foundation, and a stone-masonry water tank constructed during the Ruiz and Aguirre occupation will be preserved in a Town of Marana public heritage park. The stone building and water tank are well preserved and a trash-filled pit between the two still contains intact archaeological deposits; however, the adobe building is nearly completely deteriorated. (Al Dart)

BOSQUE

The Bosque site, BB:14:22, is probably the largest, longest occupied settlement in the eastern Tucson Basin. Located along the southern bank of Tanque Verde Creek, it is situated partly within a mesquite bosque and partly on a higher terrace. The settlement dates from at least

the Colonial period (A.D. 750-950), up to the Middle Rincon phase (A.D. 1000-1100); it probably has an earlier component as well. Much of the site is buried and is therefore likely to be well preserved. Given the size of the site and the density of remains, it probably has a ballcourt, although none has been identified yet, due to burial of the site under floodplain silts. (Henry Wallace)

CALABAZAS, NHL

Calabazas, EE:9:2, is the location of a visita, first of Guevavi and later of Tumacácori. Although only visited, at most, a few times a year, the adobe church and convento are fairly substantial. Construction probably dates to the A.D. 1760s. After Jesuits were expelled from the New World in A.D. 1768, Calabazas continued as a visita of Tumacácori, with its population much reduced by disease. Gradually depopulated, it was abandoned sometime before Mexican Independence. In the early 1850s, the church was converted to a ranch house for an operation run by Manuel Gandara, a Governor of Sonora, Mexico. Beset by Apache, this cattle operation lasted only a few years. In 1856, a United States military post, Camp Moore, was located across the Santa Cruz River, and the ranch house was used as quarters for the commanding officer. (Bill Robinson; Fontana 1971)

CAMP CRITTENDEN

EE:6:16, Camp Crittenden, was a military station established in 1868, near the pre-Civil War post of Fort Buchanan to protect settlers of the Babocomari, Sonoita, and Santa Cruz valleys from Apache depredations. It was initially staffed with troops stationed at Tubac. The post contained company barracks, kitchens and bakery, mess, officer's quarters, married soldier's quarters, stables, hospital, and corrals. Construction was primarily adobe and stone. The detachment of soldiers was led by Lieutenant Cushing, who engaged in a tragic battle with Cochise in 1871. In 1873, the post was again abandoned for a more strategic location farther east. (Bill Robinson; Serven 1965)

CCC CAMP PIMA

AA:12:467, Camp Pima, was a Civilian Conservation Corps (CCC) installation operated from 1933 to 1941. The remains of melted adobe structures, small-scale features, and roads lie along Rudasill Road, west of Sandario Road in the Tucson Mountain District of Saguaro National Park. The camp was built to house more than 200 men who were trained for various construction-related, surveying, and landscaping tasks. These men built roads and visitor facilities for Tucson Mountain Park. Their distinctive construction style, using native stone and wood, can be seen in the picnic area ramadas and restrooms, as well as in spillways and checkdams found throughout the county park and national park today. (Sue Wells)

CIENEGA STAGE STOP

Located along Pantano Wash in the southeastern part of the Tucson Basin, the Cienega Stage Stop, BB:14:498, was built in 1858, during the early Territorial period, as an important link in

the Butterfield Overland Mail. It served as the first stop into Tucson for westbound traffic, but was abandoned at the outbreak of the Civil War in 1861. It was reopened in 1866, and continued in use until 1870, when it was destroyed by Apaches. The ruins passed into obscurity in 1880, when they were impacted by construction of the Southern Pacific Railroad. Portions of the coral walls and the original structure still exist adjacent to the tracks. (Carla Van West)

CORTARO FAN

Cortaro Fan, AA:12:486, is a large Archaic and Early Agricultural period site located on an alluvial fan on the western bajada of the Tortolita Mountains. Projectile point types and radiocarbon dates indicate it was occupied multiple times by Archaic hunter-gatherers and early farmers between about 4,000 and 2,000 years ago (Middle Archaic-Late Archaic/Early Agricultural periods). Artifacts and cultural features are preserved both on the surface and subsurface. The site is important due to its long timespan of occupation and good preservation of cultural materials. (Jonathan Mabry)

COURT STREET CEMETERY

The Court Street Cemetery, BB:13:156, was established in 1875, and was used until 1907. The cemetery is bounded on the west by North Main Avenue, on the east by North Stone Avenue, on the south by East Second Street, and on the north by Speedway Boulevard. It was the primary cemetery for the entire community until Holy Hope and Evergreen cemeteries opened in 1907. Some burials were moved to the new cemeteries; however, many were left in place and have subsequently been discovered. The remaining burials are endangered by construction and utility projects. (Homer Thiel)

DAIRY

The Dairy site, AA:12:285, is a large, prehistoric village encompassing some 100 acres on the eastern side of the Santa Cruz River near Cortaro Farms Road. Originally recorded by the Arizona State Museum in 1982, the site was described as a rich site containing deeply buried archaeological deposits. Subsequent testing of the site in advance of development in the mid-1990s confirmed this and indicated the site was occupied from the Late Archaic period to the end of the Pioneer period (circa 1000 B.C. to A.D. 775). This was a critical time, when people in the Tucson Basin settled in permanently occupied villages, practiced agriculture, and adopted ceramic technology. Testing also revealed a rare late Classic Hohokam settlement from the Tucson phase (A.D. 1300-1450). While only 5 percent of the site was tested, 95 archaeological features were found, including pithouses, hearths and roasting features, living surfaces, human graves, canals, and an adobe surface structure. A small portion of the site is owned and protected by the Archaeological Conservancy. Despite recent development impacts, the Dairy site represents a long-lived site with high research potential for the study of the beginning and ending phases of the Hohokam culture in the Tucson Basin (David Cushman; Altschul and Huber 1995; Deaver 1996)

DONALDSON

EE:2:30, the Donaldson site, is a Late Archaic/Early Agricultural site buried in alluvium near the confluence of Matty Canyon Wash and Cienega Creek. It contains pit structures, trash deposits, human burials, and other features dated to some 2,700-2,500 years ago, based on artifact types and radiocarbon dates. Part of the site has been eroded by floods, but a portion is preserved in the wash banks. The site is important due to its good preservation and the relative rarity of Early Agricultural sites in southeastern Arizona outside of the Tucson Basin. (Jonathan Mabry)

EMKAY

BB:13:123, the Emkay site, is a Hohokam village site located near the confluence of the Tanque Verde Wash and Agua Caliente Creek. The site is characterized by a dense scatter of artifacts and ash covering an area approximately 300 m long by 250 m wide. Surface ceramics indicate the site was occupied from the Cañada del Oro through Tanque Verde phases of the Tucson Basin Hohokam sequence, or between A.D. 750 and 1300. The site was recently tested and is known to contain multiple pithouse features and trash mounds. Although impacted by vandalism, the site has great potential to contribute information about prehistoric occupation in the eastern Tucson Basin (David Cushman; Jones and Dart 2000)

ESMOND

BB:13:382, the Esmond site, is the archaeological component associated with Esmond Station, also selected as an important archaeological site for its architectural significance. Esmond Station was a watering stop on the original Southern Pacific railroad line that came through Tucson in 1880, and eventually linked Los Angeles with El Paso. The site consists of industrial remnants, the existing standing structures, and trash from the railroad workers who lived at the station and serviced the line (David Cushman; Myrick 1975)

FORT LOWELL

Fort Lowell, BB:9:40, was a supply base for the Apache campaigns between 1873 and 1891. Its primary role was to escort wagon trains, protect settlers, guard supplies, patrol the border, and conduct military actions against the Western and Chiricahua Apache. Fort Lowell is now a city park where visitors can tour adobe buildings, visit the museum, and walk through an outdoor exhibit about the prehistoric Hohokam who lived in a large village (the Hardy site) at this same location more than 500 years ago. Historic structures on the park property include ruins of the hospital, the cavalry quarters, kitchen building, part of the band quarters, and portions of adobe corrals and stables. Adjacent to the park are other buildings still used as residences, including the Officers' Quarters, the Quartermaster and commissary depot buildings, and the army post sutler's (trader's) building. (Al Dart; David Faust)

GIBSON RANCH

Gibson Ranch, DD:8:84 lies on a terrace east of the Santa Cruz River in Santa Cruz County. It has surface indications of a Rincon/Rillito phase occupation (A.D. 700-1150). Although not indicated on the surface, pithouse architecture is likely. There is a high density of ceramic and lithic trash covering more than 2 acres. (Bill Robinson)

GREATERVILLE

The discovery of placer gold in the early 1870s attracted miners to the Santa Rita Mountains and to the Greater mining camp. From 1873 to 1879, the community was known as Santa Rita, and Greaterville (EE:1:81) thereafter. During the 1870s, hundreds of miners and their families mined the drainages in the area, using the placer technique. Between 1875 and 1885, it is alleged that as much as \$500,000 in gold was recovered. Mining continued until the gravel-bearing deposits were largely depleted in the 1880s. In its prime, the town offered several dance halls, saloons, shops, and in 1882, a school opened. The post office opened in 1879, closing in 1946. Mining continued sporadically after the 1890s, picking up during the depression years. The school continued until 1952, and by 1976, only a few families lived in the area. Today, the remains of Greaterville are largely part of the archaeological record. (Jim Ayers)

GUEVAVI MISSION, NHL

Guevavi Mission, EE:9:1, is northeast of the City of Nogales. It consists of the standing walls of an adobe church, an attached convento, or living quarters, and a number of ancillary buildings. The site was sporadically occupied between A.D. 1701 and 1773, at which time it was abandoned. The present church was constructed in A.D. 1751, but at least two other structures preceded it. The convento dates to the same year, or to an earlier building episode in A.D. 1732. Guevavi served as one of only two head missions, or cabeceras, in the National Heritage Area and is the only Jesuit-built structure in Pimería Alta that was not destroyed or replaced by later missionary efforts. (Bill Robinson; Burton 1992; Kessell 1970; Robinson 1976)

HARDY

The Hardy site, BB:9:14, is a large Hohokam village that dates from the Pioneer period through the early Classic period, from approximately A.D. 700 to 1200. Situated southwest of the confluence of Pantano and Tanque Verde washes, about one-quarter of the site currently lies beneath Fort Lowell Park. It is part of the Fort Lowell National Register District. Only a small amount (perhaps 5 percent) of the site has been excavated, and much of the site appears to be intact beneath the park and surrounding neighborhood. The Hohokam took advantage of rich riparian resources when they established the Hardy site, which was one of the first Hohokam villages in the Tucson area. The site likely became a focus for other settlements in the northeastern Tucson Basin. The villagers maintained a wide network of contact and trade, as evidenced by artifacts found at the site, including pottery from the Gila River, argillite and serpentine from the Salt River-Tonto Basin, shell from the Gulf of California, and pottery from Nayarit, Mexico.

As a long-lived, reasonably well-preserved village, the Hardy site has great archaeological potential. For example, exact dating of Hohokam sites has been challenging because the Hohokam usually did not use tree-ring datable wood in their structures; however, the Hardy site villagers did. (The juniper and Douglas fir samples found at the site cannot be dated yet because the dating sequence for the Tucson area has not been extended back to when the Hohokam lived at the site.) The Hardy site also has the potential to answer questions about inadequately understood periods in the Hohokam cultural sequence—a cemetery dating to the A.D. 800s and a house dating to the A.D. 700s have been found there. Finally, the location, size, and longevity of the site make it ideal for addressing questions about social organization and interaction among the Tucson Basin Hohokam. (Linda Gregonis)

HELVETIA

EE:1:80, Helvetia, was a mining community, and like so many in the region, suffered the ups and downs of the market for copper ore. Mines were probably used after the civil war, but it was not until the early 1880s that several large mining claims were developed, including the Old Dick, Heavyweight, and Tallyhoo mines. In the 1890s, the Helvetia Copper Company formed, and it was in response to this that the community of Helvetia developed. Copper mining continued until 1911, when low copper prices led to a shut down, although sporadic mining continued through the years of World War I. The post office opened in 1899, and was closed by 1921. (David Cushman; Pima County 2002)

HODGES RUIN/FURREY RANCH

AA:12:18 and AA:12:31/32, Hodges Ruin and Furrey Ranch, respectively, are probably the most famous in the Tucson area, because they were the location of the earliest large-scale excavations conducted in the 1930s, by Isabell Kelly, under the auspices of Gila Pueblo. The surrounding area has evidence of essentially continuous settlement for about 4 km along the high ridge bordered by the Rillito River on the north and the Santa Cruz River on the south. Occupation in this area spans the entire Tucson Basin sequence. The Hodges site, partly excavated by Kelly and later by the Arizona State Museum, had one, and almost certainly two ballcourts, indicating occupation during the Hohokam pre-Classic (A.D. 650-1150). The Furrey Ranch site, a short distance southeast, was an aggregated Tucson phase (A.D. 1300-1450+) village that probably had one or more platform mounds. Small portions of these areas remain undeveloped in lots and backyards and are intact beneath foundations and trailers. Located in a critical centerpoint for trade and communication in the Tucson area, these sites are extremely important in informing about the structure and economics of prehistoric settlement in the region, and even though large portions have been destroyed, even small remnants offer vital information. (Henry Wallace)

HONEYBEE VILLAGE

BB:9:88, Honeybee Village, is a large prehistoric village located along the drainage of the same name in the Cañada del Oro Valley. It is one of the settlements in the region established near the beginning of the Hohokam cultural sequence (around A.D. 450-600), and continuously

occupied up to the thirteenth century. The settlement has a cluster of 19 large mounds that surround a possible plaza, with a small ballcourt and a walled enclosure that may have enclosed rooms or a special-use space near the end of its occupation. An estimated 500-800 pit structures are present on the site, along with many other cultural features. It is the only such large village site left largely intact within the town of Oro Valley. (Henry Wallace)

HOUGHTON ROAD

The Houghton Road site, BB:13:398, was an early farming settlement at the confluence of Tanque Verde Creek and Agua Caliente Wash in the northeastern part of the Tucson Basin. It is the type-site of the Agua Caliente phase (A.D. 50-550) of the Early Ceramic period, which represents the transition between the Late Archaic period and the Hohokam culture of southern Arizona. The presence of ceramic vessels and the construction of larger, well-built pithouses distinguish the Houghton Road site from Late Archaic farming settlements. However, the site lacks the distinctive ceramic, architectural, and other material culture characteristics of later Hohokam culture. Only a small part of the site has been investigated, and a later Colonial period Hohokam component may be present. (Carla Van West)

JOHNNY WARD'S RANCH

Johnny Ward's Ranch, EE:5:6, is a three-room, flat-roofed, adobe building located along Sonoita Creek a few miles south of Patagonia. Its significance lies primarily from its role in Anglo-Apache hostilities. Ward first settled at this location in 1859, and his wife was a Mexican woman with children from a previous marriage. One of these, Felix, a boy of 12, was kidnapped by Apache during a raid in January 1861. A detachment of soldiers from nearby Fort Buchanan, led by Lieutenant Bascom, was dispatched to recover Felix and some lost cattle. The consequence of this incident was a confrontation between the Apache leader Cochise and Bascom at Apache Pass in the Chiricahua Mountains. This location has been popularly, but perhaps inaccurately, credited with the beginnings of 11 years of Apache depredations in southeastern Arizona. As a result, Ward abandoned his ranch. At the same time, Fort Buchanan was abandoned during the Civil War. After 1867, the ranch was acquired for brief periods by a variety of owners and typifies Anglo ranch/rural settlements of that time and place. (Bill Robinson; Fontana and Greenleaf 1962)

JULIAN WASH

The Julian Wash site, BB:13:17, is one a series of large, very long-lived prehistoric settlements along the Santa Cruz River in Tucson. Through happenstance, a large portion of the site remains undisturbed, even though it is located within urban Tucson. Consequently, it is uniquely capable of providing important information about the structure and organization of large Tucson Basin Hohokam settlements. Known prehistoric occupation extends from about 800 B.C. to A.D. 1200. Excavations in 2000, revealed it was one of three large settlements in the region that specialized in pottery production from A.D. 900-1150. From a research standpoint, the site is of particular interest due to a known spatially discrete portion of the site dating to the Early Ceramic period (A.D. 150 to 650). A historic component at the site includes

foundations and related features from the St. Joseph's Children's Home, an orphanage built in 1904. (Henry Wallace)

LAS CAPAS/ COSTELLO-KING

Las Capas, AA:12:111, is a large, long-occupied Early Agricultural site related to the nearby Costello-King site, AA:12:503. Las Capas is buried in the former floodplain of the Santa Cruz River near the Ina Road/Interstate 10 interchange and the county's Ina Road sewage treatment plant. Excavations in several areas have documented several layers containing remains of occupations from between about 4,200 and 2,500 years ago. Documented features include canals, pit structures, storage pits, trash deposits, and a cemetery in layers dating between approximately 3,400 and 2,800 years ago. Among the significant artifacts recovered are stone smoking pipes with tobacco residues. Large areas of the site have been removed by construction of frontage roads and sewage plant facilities, but extensive portions are preserved in undeveloped areas within the sewage plant and the park to the south, beneath the interstate and Ina Road, and possibly east of the interstate. The site is important due to its large size; its long time span of occupation; and the presence of the oldest cemetery in the southwestern United States, the oldest canals in North America, and the oldest tobacco pipes in the world. (Jonathan Mabry)

LIME KILNS, SILVERBELL ROAD

Sweetwater, AA:12:106, and Sunset, AA:12:150, are two lime kilns—historic structures built in the late nineteenth century for lime production. Both are located along Silverbell Road within half a mile of each other. The Sweetwater kiln was made from adobe bricks and originally assumed a conical, or perhaps a cylindrical shape. The upper portion of the structure is missing, but the base, measuring 7 ft across, still survives. The Sunset lime kiln was constructed using the same materials and according to the same conical or cylindrical shape. The base portion of this structure also remains. The site is also the location of the "Famous Lead Crosses or Tucson Artifacts" excavated from the base of the kiln uncovered in the 1920s. Two lead crosses with Latin and Hebrew inscriptions are said to have been found at the site, which were then reported as evidence of a European occupation of Tucson in the Middle Ages. The claim is widely regarded as a hoax. Both lime kilns are examples of frontier technology that was commonly used in Pima County but of which there are a limited number of remaining examples. (David Cushman; Doak et al. 2001)

LINDA VISTA HILL

Linda Vista Hill, AA:12:57, is the trincheras component of the Los Morteros site, AA:12:57, located in the Tucson Mountains at the northern edge of this site. Dating to the early Classic period between A.D. 1200 and 1350, this hillside has over 150 terraces. Approximately 75 pithouses are excavated into the terraces and a massive adobe-walled compound is located on the hill summit. House structures are furnished with a complete array of domestic artifacts, and the site appears to reflect the remains of a large village that was an integral part of the early Classic period Marana Community. Today, the lower slopes are part of the Los Morteros

Estates development, and the upper slopes (approximately 80 percent of the site) are owned by Pima County and the Archaeological Conservancy. (Paul Fish)

LOMA ALTA

BB:14:10, the Loma Alta site, is a well-preserved prehistoric Hohokam community in a very scenic portion of the Rincon Valley north of Rincon Creek. It has two, and perhaps one or more additional, masonry-walled compound enclosures and over 30 masonry rooms visible on the surface. Many others are likely present. Similar to the Sabino Canyon Ruin, BB:9:32, this is a sizeable Tanque Verde phase (A.D. 1150-1300) village. (Henry Wallace)

LOS MORTEROS

AA:12:57, Los Morteros, is a Hohokam ballcourt village ruin located on the Santa Cruz floodplain near the Point of the Mountain at the northern end of the Tucson Mountains. Occupied between the end of the Colonial period and the early Classic periods (A.D. 850 and A.D. 1300), the site is one of the largest prehistoric communities in the Tucson area. In 1962, the site was recorded for the Arizona State Museum and given its present name, Los Morteros, for the bedrock mortars found on boulders in its center. In the mid-1980s, planning began for a large-scale residential development project to be located within much of the Los Morteros site area. In 1988, archaeological excavation in the northern and southern ends of the site was conducted in advance of housing construction, which became known as the Continental Ranch subdivision project. The remains of 770 prehistoric features were uncovered, including 349 houses, an adobe-walled compound, and five discrete cemeteries, along with tens of thousands artifacts. It was during this investigation that evidence of the historic Point of the Mountains stage station was found within the limits of the nearby Puerta del Norte trailer court. Los Morteros has also been identified through historic records as the probable location of the Llano del Azotado campsite used by Juan Bautista de Anza, and it is part of the Anza Trail identified by the National Park Service as a National Historic Trail. The northern portion of the site remains intact, and Pima County has recently purchased the core of the ancient village, including the ballcourt feature. Despite having been partially destroyed, Los Morteros remains an important source of information about Hohokam culture in the Tucson Basin (Henry Wallace; Wallace 1995)

LOS POZOS

Los Pozos, AA:12:91, is a large Archaic and Early Agricultural site located in the former floodplain of the Santa Cruz River near the Prince Road/Interstate 10 interchange. Hundreds of pit structures and numerous storage pits, cooking pits, wells, and human burials have been documented. Artifact types, architectural style, and radiocarbon dates indicate it was occupied multiple times by Archaic hunter-gatherers and early farmers between about 5,300 and 2,000 years ago (Middle Archaic-Late Archaic/Early Agricultural periods). Large areas of the site were removed during construction of frontage roads along Interstate 10, but other extensive areas are probably preserved beneath the interstate, and west of it. The site is important due to its long timespan of occupation, the large size of its Early Agricultural occupation, and its good preservation. (Jonathan Mabry)

MARANA MOUND

Described by researchers as a "rounded adobe mass," the Marana mound, AA:12:251, is the remnant of a large platform mound that was once the focal part of the prehistoric community that lived between the Santa Cruz River and the Tortolita Mountains during the Tanque Verde phase of the Tucson Basin Hohokam sequence (A.D. 1150-1300). The mound is surrounded by an adobe compound wall from which multiple rooms were constructed. This structure, in turn, is associated with 30-35 additional nearby residential compounds, multiple house features both inside and outside the compounds, wall segments, and trash mounds that collectively cover an area of approximately 1 mi². (Paul Fish; Fish et al. 1992)

MARSH STATION ROAD (MESCAL WASH) SITE

The Mescal Wash site, EE:2:44, is a large, multicomponent habitation site occupying a broad ridge at the confluence of Cienega Creek and Mescal Wash. Recent excavations by Statistical Research, Inc., provided evidence for substantial occupation throughout the Ceramic period (A.D. 150-1450). Located southeast of Tucson at the boundary between the Sonoran and Chihuahuan deserts, the site exhibits a long-lived local cultural tradition influenced by both Hohokam and Mogollon. The approximately 100 pit structures excavated at the site show a wide temporal and stylistic variability, including architecture unique to this area. Large portions of the site not impacted by construction will be protected through a long-term management plan. The site is important for the study of community development and cultural identity in this inadequately understood portion of southeastern Arizona. (Carla Van West)

NATIONAL CEMETERY AT STONE AND ALAMEDA

The National Cemetery, BB:13:325, in Tucson, was established in the early 1860s, and was used until the mid-1870s, with many burials relocated in the 1880s. The cemetery was located between East Alameda Street on the south, East 7th Street on the north, North Stone Avenue on the west, and North 6th Avenue on the east. It was once surrounded by an adobe brick wall and was the primary cemetery used by residents until the establishment of the Court Street Cemetery. Burials from the National Cemetery have been frequently encountered over the last 50 years. In situ burials are endangered by construction and utility projects. (Homer Thiel)

PANTANO TOWNSITE

EE:2:50, the Pantano townsite, is a historic railroad era community that was originally established in 1880, by the Southern Pacific Railroad (SPRR) on the southern side of Cienega Creek. The original impetus for the existence of the town was its utility as a good place to build a depot and other facilities for the SPRR. This then attracted private businesses and residential settlement. Several warehouses and a store with a blacksmith and a carpenter shop were erected at the original townsite, along with several private dwellings. In 1880, the entire population of the town was recorded as 75 people. In 1887, flooding along Cienega Creek prompted removal of the Pantano Townsite to the northern side of the creek. There, the town

was in existence until the mid-1950s. During this time, Pantano continued to provide the SPRR with facilities necessary for the railroad's operation, which continued to attract commercial and residential development. By 1905, the town was listed as having a population of 100, and had a deputy Sheriff, a justice of the peace, and six small businesses including a general store and livery. Later, the community would have a bank, a schoolhouse, a telegraph office, and a post office. Population fluctuated throughout the years between World War I and the 1930s, reaching a peak of 500 in 1922, although by 1941, population dwindled to 40. After World War II, Pantano went into its final decline. The post office closed in 1952, and sometime before 1956, the SPRR closed its operations. All that currently remains at the townsite are foundations of the houses and business that once occupied the site and related features and artifacts – all now part of the archaeological record of this small western railroad town. (Jim Ayres; Ayres et al. 1994)

PICTURE ROCKS

On the grounds of this Redemptorist retreat located east of the Saguaro National Monument is a group of the finest and most easily accessible examples of prehistoric Hohokam petroglyphs in Pima County (AA:12:62). The glyphs were pecked into the volcanic bedrock along a wash between 500 and 1,000 years ago. The many designs that have been published include spiral, bullseye, and representations of bows and arrows, dancers, hunters, and animals. (Al Dart)

PIG FARM

The Pig Farm site, AA:11:12, is a very large Hohokam ballcourt village site covering the ridge between the Santa Cruz River and the Brawley Wash in Marana. Encompassing some 700 acres, the site was occupied during the Colonial and Sedentary periods in the Tucson Basin Hohokam sequence, or between A.D. 750 and 1150; however, it also has a late Classic period component (A.D. 1300-1450). The site is thought to be temporally and spatially associated with the Los Robles early Classic period community to the north. The ballcourt and small mound at the Pig Farm site suggests it was the community center before power shifted to the Los Robles Platform Mound site. Little formal excavation has been conducted at the site, and the property on which it is located has been subdivided and is being developed for individual residences. Despite this, the Pig Farm site remains largely intact and has the potential to be highly informative about social and political organization among the Hohokam in the Tucson Basin. (John Madsen)

PROTOHISTORIC BURIALS AT 17TH STREET AND MAIN

BB:13:495, Tucson's only known Protohistoric period cemetery, dates from between A.D. 1450 and 1700. It lies just below the ground surface south of West 17th Street and South 9th Avenue, within the Barrio Libre. Over the last 50 years, several utility placement projects have encountered human burials, with at least six recovered by archaeologists. The burials lay in flexed positions, lacked artifacts, and were covered with red pigment. The site is currently either in private or City of Tucson ownership and is endangered primarily through routine utility work in the area. The extent of the cemetery is unknown. (Homer Thiel)

RABID RUIN

Originally recorded in 1959, Rabid Ruin, AA:12:46, is a large multicomponent habitation site located on the Santa Cruz floodplain dating to the Tanque Verde and Tucson phases of the Hohokam Classic period in the Tucson Basin sequence (A.D. 1150-1450). It also contains evidence of both earlier Archaic period occupations and later Protohistoric settlement, which are very rare in Pima County. Several small salvage excavations were conducted at the site in 1969 and 1980, and more extensive work was done in 1988-1989. During that investigation, the site area was defined (24.4 acres) and numerous features were recorded, including a single late Classic period adobe-walled house, six pithouses, multiple hearths and storage pits, and 32 human cremations. Artifacts recovered from the site included ceramic vessels, flaked stone tools, grinding tools, decorative beads, worked shell and bone, and the remains of a burned basket. Portions of the site have been disturbed through gravel mining and development; however, as the excavations in 1988 and 1989 show, the site retains high information value (David Cushman; Slawson 1990)

ROLAND

Roland, AA:12:86, is a large Archaic site located along Silverbell Road about a mile south of Ina Road on a low fan terrace bordering the western edge of the Santa Cruz River floodplain. It has been systematically surface collected and mapped by amateur archaeologist Edward Roland for a number of years. The site covers an area of approximately 8,000 m², and artifact density is high on the surface. Large numbers of flaked and ground stone tools have been found. Projectile point types include Middle and Late Archaic/Early Agricultural types (3000 B.C.-A.D. 150), indicating multiple occupations over a long time. Surface features are primarily clusters of fire-cracked rocks, and the presence of buried features is unknown. The site is significant, because it is one of only a few large, multicomponent Archaic sites with high artifact densities in the region. (Jonathan Mabry)

ROMERO RUIN

BB:9:1, Romero Ruin, is the name given to a large prehistoric village site located in Catalina State Park, approximately 14 miles north of Tucson. Nestled in the rugged foothills of the Catalina Mountains, the site was continuously occupied by the Hohokam between approximately A.D. 550 and 1450, and it represents one of the most significant archaeological resources in the northern Tucson Basin. It was also the site of a ranching homestead owned by Francisco Romero, who built his house within the walls of a late prehistoric residential compound sometime before 1850, when the region was under constant Apache attack. For many years, locals mistook the compound and its ruins as the site of the fabled Spanish Mission of Ciru, said to have contained a fortune in buried Spanish gold. Romero Ruin is 20 acres in size and occupies a finger ridge of land defined by three washes, the largest of which is Sutherland Wash. It contains two ceremonial ballcourts, 17 trash mounds, at least one cemetery, a plaza, and the walled compound and the ruins therein. Just outside the limits of the site are the remains of enormous prehistoric field systems and other sites associated with the long occupation of the land by prehistoric people. Romero Ruin is a part of the Sutherland Wash Archaeological District, which was listed on the National Register of Historic Places in 1988. (David Cushman; Swartz 1991)

ROSEMONT TOWNSITE

The town of Rosemont (EE:2:138) was first settled by William McCleary in 1879. With L. J. Rose, McCleary located and developed 30 mining claims. Together with William Shaw, they formed the Rosemont Smelting and Mining Company. By 1896, perhaps earlier, there were several buildings, including a hotel, post office, store, two assay offices, stable, smelter, and warehouse. Mining was not notably successful in the area; the operation was sold to the Lewisohn Brothers of New York in 1886, and the smelter only operated intermittently and stopped for good sometime between 1903 and 1908. Obtaining coke for fuel was a problem, but the Lewisohn Brothers claim was one of the two biggest producers in the Rosemont area of the Helvetia District. After 1905, however, the hotel and store continued to serve as loci of community activities at least until World War I. The hotel was dismantled for lumber and brick about 1938. Only the foundations of the hotel (brick pylons), store, and warehouse remain. Only rubble and artifacts exist for the smelter; only rock, adobe wall fall, and the brick assay oven base survive from the lower assay office. There is no architecture, although there are many surface and subsurface foundations and artifact scatters. Maximum dimensions are 2,000 ft east-west by 500 ft north-south (Jim Ayres; Ayres 1984)

SABINO CANYON RUIN

The Sabino Canyon Ruin, BB:9:32, is a large prehistoric site located northeast of Tucson along the southern side of the Santa Catalina Mountains, just above (north of) the confluence of Sabino Creek and Bear Creek. Archaeological survey and testing over many years indicates the primary site occupation dates between A.D. 950 and 1350, bridging the late pre-Classic and Classic time periods in the Tucson Basin Hohokam sequence. The site covers an area approximately 131 acres in size, and includes pottery, stone, bone, and shell artifacts in dense artifact scatters and trash middens; multiple pithouse dwellings; five apartment-like housing compounds with adobe and rock walls; ancient canals used to water nearby fields; and dog burials. Evidence of some pre-Hohokam use of the site or its immediate vicinity is also indicated by finds of several projectile points dating to the Early, Middle, and Late Archaic periods, and by one Plainview-type spearpoint representing the Paleoindian culture—the first people known to have inhabited the New World. Part of Sabino Canyon Ruin is on property owned by Pima County; the rest is on private land. The site has been partially excavated but remains largely intact. It is an important source of information about Hohokam lifeways, trade, material culture, social organization, and site abandonment. (Al Dart)

SAGUARO SPRINGS

First recorded in the 1970s, the Saguaro Springs site, AA:12:77, is a small Hohokam settlement that was occupied during the middle Rincon phase of the Hohokam sequence, between A.D. 1000 and 1100. The site is located on the western side of the Tucson Mountains near Rillito Peak. It may have been a satellite hamlet to Huntington Ruin, a large Hohokam village site located nearby. Recent testing of the site identified 33 subsurface features, including multiple pithouses, storage pits, roasting pits, and a canal segment. The site appears to be part of a larger pattern of adaptation during the time when hamlets are located on old terraces away from primary water sources. It is important for its evidence of water control technology. The

site is on land that presently is being considered for development (David Cushman; Riggs 1998)

SAN AGUSTÍN/CLEARWATER

The former floodplain of the Santa Cruz River at the base of A-Mountain has yielded evidence of repeated occupations between about 4,200 and 100 years ago, over a large area, at San Agustín/Clearwater, BB:13:6. The cultural remains that have been documented to date include a large number of canals dating between about 2,000 and 100 years ago; a campsite of Middle Archaic hunter-gatherers with pit structures and ceramic artifacts dating to about 4,200 years ago; settlements of early farmers with large numbers of pit structures dating between approximately 2,800 and 2,000 years ago; Hohokam fieldhouses dating to roughly 1,300 years ago; building foundations, trash deposits, gardens, and cemeteries of a Spanish mission occupied between the 1770s and the 1840s; and house foundations and trash-filled wells from the late nineteenth century. Large portions of the site have been removed by clay mining and landfill operations, but cultural remains are still preserved in vacant lots and beneath streets, houses, and landfills. The site is important due to its large size and long timespan of occupation; the rarity of Middle Archaic cultural remains; the presence of the oldest pit structures in southern Arizona and the oldest ceramic artifacts in the southwestern United States; the rarity of Spanish period remains; and the community's identification of this location as the birthplace of Tucson. (Jonathan Mabry)

SANTA CRUZ BEND

The Santa Cruz Bend site, AA:12:746, is the remains of a large early farming village buried in the former floodplain of the Santa Cruz River near the Miracle Mile/Interstate 10 interchange. Hundreds of pit structures, including houses, a large ceremonial structure, and storehouses have been documented. Artifact types, architectural style, and radiocarbon dates indicate the site was occupied multiple times between about 2,800 and 2,200 years ago, during the Late Archaic/Early Agricultural period. Portions of the site have been removed during construction of roads and buildings, although extensive areas are preserved beneath the interstate and on University of Arizona property to the west. The site is important due to its very large size and good preservation, and because the documented ceremonial structure is the oldest known example in the southwestern United States (Jonathan Mabry)

SOLOMON WARNER'S MILL, NRHP

BB:13:57, Solomon Warner's mill, was constructed as early as the mid-1860s. Solomon Warner purchased the property, including a mill wheel, from other individuals and soon opened a grain mill powered by water drawn through an acequia along the base of A-Mountain. Warner's mill provided residents of Tucson with wheat flour and corn meal. Its ruins are visible along the base of A-Mountain and are relatively well preserved. The property is in private ownership. (Homer Thiel)

SPENCE SITE

The Spence site, BB:13:120, is a large Hohokam primary village site located on a ridgetop overlooking the Santa Cruz River several miles north of the Zanardelli site, BB:13:1/12 (see below). Archaeological evidence indicates occupation between A.D. 1100 and 1450 during the Classic period of the Hohokam sequence in the Tucson Basin. The site is approximately 1,100 ft by 600 ft in size, and consists of an extensive scatter of pottery sherds and stone tools with several trash mounds and areas of stained earth indicating buried deposits. While impacted by modern roads and houses, portions of the site remain, containing significant archaeological deposits from late prehistoric times. (David Cushman; Doelle and Wallace 1985; Wright 2000)

STEAM PUMP RANCH

George Pusch and John Zellweger arrived in Tucson in 1874. Shortly thereafter, they purchased part of the old Cañada del Oro Ranch. They registered the PZ brand and put in a steam pump from which the ranch got its name. Gradually, the ranch expanded to include land along the San Pedro River between Mammoth and Winkleman. Steam Pump Ranch, BB:9:75, was a stopover place for travelers in the nineteenth century. Author Harold Bell Wright was a frequent visitor. The ranch site is well preserved and represents a rare site, which has been extensively documented through contemporary accounts and photographs, as well as oral histories. The property is in private ownership. (Jim Ayers; Homer Thiel)

STONE PIPE

The Stone Pipe site, BB:13:425, is a large Early Agricultural and Early Ceramic period site located along Interstate 10 between Grant Road and Speedway Boulevard. It contains large numbers of pit structures and other features dating between about 2,400 and 1,500 years ago. Portions of the site have been removed by construction of a frontage road and by residential development, although significant portions of the site are probably preserved beneath the interstate and in undeveloped lots east of the interstate. The site is important due to its large size, its long timespan of occupation, and the rarity of cultural remains from the Early Ceramic period. (Jonathan Mabry)

SUTHERLAND WASH SITE

The Sutherland Wash site, BB:9:223, is a large, well-preserved Tanque Verde phase (A.D. 1150-1300) village located on the highest level ground near the headwaters of Sutherland Wash. Two masonry-walled compound enclosures are visible on the site surface, in addition to a range of room walls marked by upright slabs. Several Rincon phase sherds from the preceding Sedentary period may indicate an earlier occupation as well. The site is one of a series of such Classic period sites in the Cañada del Oro Valley. (Henry Wallace)

TANQUE VERDE WASH

The Tanque Verde Wash site, BB:14:68, is a Hohokam village site located south of Tanque Verde Creek in eastern Tucson and is bisected by Speedway Boulevard. Discovered in 1975, the site was characterized by a diffuse scatter of artifacts covering as much as 360,000 m². Subsequent testing and data recovery of a portion of the site south of Speedway Boulevard determined it was occupied by Hohokam farmers during the Sedentary period (A.D. 950-1150) of the Tucson Basin Hohokam sequence. Multiple pithouses, trash mounds, ramadas, roasting pits, fire hearths, and storage pits were found. Although impacted by road and residential construction, the Tanque Verde Wash site still retains intact portions of the original settlement with the potential to contribute information about the prehistoric occupation of the eastern Tucson Basin (David Cushman; Elson 1986)

TORTOLITA SITE

AZ EE:9:3, the Tortolita site, lies near the confluence of the Santa Cruz River and Sonoita Creek. It has a dense scatter of ceramic and lithic material and is quite large, with multiple mounds. A ballcourt is present, one of few in Santa Cruz County. The sherd collection from the site suggests a date between A.D. 900 and 1350. (Bill Robinson)

TOTAL WRECK

In 1879, silver/lead ore was discovered in the Empire Mountains. Named after the appearance of the hill in which the deposits were found, Total Wreck, EE:2:159, began mining operations in 1881, after the arrival of the railroad. The mine and townsite became a part of the Empire Mining District. By 1883, there were 200 residents, 50 houses, 3 stores, 3 hotels, 4 saloons, a butcher shop, and a lumberyard. By the end of 1884, the mine was closed. The post office opened in 1881, and was closed in 1890. Today, house foundations, stone building remnants, shafts, adits, and the smelter foundations still remain on the property. The townsite has been partially excavated. (Jim Ayres; Sherman and Sherman 1969)

TUCSON PRESIDIO

The Tucson Presidio, BB:13:81, was established in 1775, and was in use until 1856 – the end of the Spanish Colonial period. During this 81-year period, the Presidio was surrounded by a tall adobe brick wall, pierced by gates on the eastern and western sides. The interior of the fort contained houses, barracks, stables, and other buildings, including a church and cemetery. The last remnant of the presidio was torn down in 1918, and subsequent development has destroyed portions of the fort. However, significant features – such as the eastern and western walls and the cemetery – survive beneath the ground within the area bounded by Washington Street on the north, Main Street on the west, Pennington Street on the south, and Church Avenue on the east. The site is endangered by utility projects and unmonitored construction activities. (Homer Thiel)

TUMACÁCORI PEAK

Tumacácori Peak, DD:8:115, is a typical “cerro de trincheras” on the western side of the Santa Cruz Valley. It has dry-laid stone walls encircling the summit, as well as rock bays. Some 50-100 construction features are estimated; bedrock mortars and petroglyphs are also present. This is the only example of this type of site in Santa Cruz County. (Bill Robinson)

TUMAMOC HILL

Tumamoc Hill, AA:16:6, is one of the best-known and studied trincheras, or terrace hillside sites, in the Sonoran Desert. Features consist of terraces, walls, petroglyphs, trails, bedrock mortars and metates, and approximately 150 small, circular structures. Radiocarbon dating and recent archaeological excavation indicate prehistoric village occupation as early as 300 B.C., and as late as A.D. 450. Extensive prehistoric rock-pile agricultural fields cover the western and eastern bajadas of the hill. Remains related to the Carnegie Desert Laboratory are found in many locations, and systematic survey probably could document additional resources from earlier historic periods as well. Although the hill summit has witnessed considerable disturbance by construction of various communication antennae, most trincheras constructions themselves remain surprisingly undisturbed. (Paul Fish)

UNIVERSITY INDIAN RUIN

The University Indian Ruin, BB:9:33, located near the confluence of the Tanque Verde and Pantano washes, is one of the last and largest Hohokam villages in the Tucson Basin. Excavation has revealed that the site was inhabited from as early as A.D. 1100-1450, or later, possibly even to the time of first Spanish contact in Arizona. Early pithouse structures at the site were supplanted by a large platform mound and additional contiguous-walled rooms were then constructed atop the mound. A compound wall was added, creating an enclosed space used for both residential purposes and religious ceremonies. Additional room blocks were located nearby, along with groups of house structures arranged around courtyards. Part of the site remains unexcavated, and other platform mounds may be present. However, a major portion of the site located east of the University of Arizona-owned and preserved section, may have been destroyed through urban development. Despite this, what remains is important to the study of the late prehistoric period in Tucson. (Al Dart)

VALENCIA/VALENCIA VIEJA, NRHP

This archaeological site complex includes several village localities and a string of related small sites along the eastern bank of the Santa Cruz River — all of which were probably linked by a single canal system. Included are all sites in the reach of the river between the northern end of the San Xavier District of the Tohono O’odham reservation and Irvington Road on the eastern side of the river. Best known among this site complex are Valencia Vieja, BB:13:15, a large Tortolita phase (A.D. 450 to 700) village, with over 300 houses and a central plaza, and the Valencia site, BB:13:74, with its large ballcourt and two plazas and related mounds dating from A.D. 700 to 1200. The site is listed on the National Register of Historic Places. (Henry Wallace)

WEST BRANCH

West Branch, AA:16:3, was a large Hohokam village near the west branch of the Santa Cruz River—giving the site its name—on the western side of the Tucson Basin. The Tucson Mountains make an impressive backdrop. The site was occupied during the Rincon phase, around A.D. 1000. Although the settlement was large enough to call a village, it was occupied for only a relatively brief time. There is no ballcourt. The Hohokam made a living by farming the floodplains of the west branch and the main branch of the Santa Cruz River. The site has been investigated by several different archaeological organizations over the years, and a great deal is known about life at West Branch. One of the more interesting things uncovered was the presence of tool kits and raw materials on the floors of the houses, indicating pottery making occurred there. Painted pottery, including the enigmatic Rincon Polychrome, was evidently produced at the settlement. (Carla Van West)

WHIPTAIL RUIN

Agua Caliente Park is located on the northern end of Whiptail Ruin, BB:10:3, a village site that dates from the mid-A.D. 1200s to the 1300s. The village, most of which is south of Prince Road, consists of aboveground adobe-and-jacal (mudded brush) houses arranged in a style that shows influence from the Mogollon and perhaps Anasazi cultures to the northeast. Pottery found at the site also reflects influence from Mogollon and Anasazi people. The site is one of a few sites in northeastern Tucson that may have been built, in part, by people from the San Pedro Valley east of Tucson, or by migrants from the Mogollon or Anasazi homelands. Whiptail is one of two sites in Tucson that have been dated using tree rings (from conifer posts and beams found in houses). About half of this interesting village remains unexcavated. It has been impacted by low-density housing south of Agua Caliente Park. Although house construction has undoubtedly destroyed some of the features, private ownership and restricted access have likely protected many unexcavated features from vandalism. (Linda Gregonis)

YUMA WASH

Yuma Wash, AA:12:311, is an ancient village site in Marana, occupied from the Cañada del Oro phase (A.D. 750-850) into the late Classic period after A.D. 1325. The site contains Hohokam pithouses and aboveground pueblo-style rooms, as well as cremation and inhumation burials. It may be the only Pima County site west of the Santa Cruz River that contains both Gila Polychrome and indented corrugated pottery. Part of the site southwest of Silverbell Road was excavated in 1999, prior to development. The portion northeast of the road has only been tested and is scheduled to be preserved in place and used as the focus of a hands-on archaeological education program for the public in a Town of Marana public heritage park. (Al Dart)

ZANARDELLI

The Zanardelli site, BB:13:1/12, is the large Hohokam Classic period community associated with the more extensive complex of the same name described in this report. The site covers approximately 240 acres and is located south of Tucson on the eastern side of the Santa Cruz

River. The Zanardelli site has been repeatedly recorded by professional archaeologists since its first description in 1929, when it was said to have contained a compound with multiple rooms and mound features. In 1948, the site was given its name after the landowner, and in the 1980s, sites BB:13:1 and BB:13:12 were combined when it was recognized that they were part of a single large village settlement. Evidence gathered through survey and limited excavations indicates the site was occupied initially between A.D. 1-750, during the Early Ceramic period, followed by a period of abandonment. It was then reoccupied during the Late Sedentary period and continuously inhabited through the Classic period, from approximately A.D. 1100-1450. Although the site has been impacted by modern agricultural land leveling – as well as by road, railroad, and residential construction – portions of the site still exist that could help address many remaining research issues for this area. (David Cushman; Doelle and Wallace 1985; Wright 2000)

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DESCRIPTIONS OF IMPORTANT ARCHAEOLOGICAL SITE CLUSTERS

This is a list of some of the most important archaeological site clusters (or districts) within the proposed Santa Cruz Valley National Heritage Area. It includes: (1) selected clusters/districts currently listed on the National and State Registers of Historic Places; (2) selected clusters/districts that are unlisted but likely eligible for inclusion in the National and State Registers; and (3) selected clusters/districts with local significance. The archaeological site clusters in Pima County were identified in 2002 as Priority Archaeological Site Complexes for the cultural resources element of the Sonoran Desert Conservation Plan (Pima County 2002). The clusters in Santa Cruz County were identified in a 2004 inventory conducted for this feasibility study by the University of Arizona Preservation Studies Program. This combined list does not include every property currently listed on the National and State Registers. It is a small sample of the historic properties with national, state, and local significance in the region, and it can be expanded in the future.

BRAWLEY, BATAMOTE CLUSTER

This group of seven Hohokam sites dating primarily to the Classic period, Tanque Verde phase of the Hohokam sequence (A.D. 1150-1300) is located along the western side of Brawley Wash at the southeastern foot of the Roskrige Mountains near Batamote Tank. The presence of tabular knives at several of the sites and a rock pile area presumably containing Hohokam dry farming agricultural features suggests this cluster is a home community of the people who spent winters in the Late Rincon and Tanque Verde phase sites farther north in the Avra Valley, within and south of the Schuk Toak District of the Tohono O'odham Reservation. The cluster includes six sites characterized by sherd and lithic scatters, some of which are extensive and contain tabular knives, hoe fragments, roasting features, and trash mounds. Rock piles are also found on one site, indicating Hohokam dry farming within this cluster. (Alan Dart)

CANOA RANCH CLUSTER

The Canoa Ranch site cluster is situated on the ranch property of the same name, which is located some 26 miles south of Tucson along the Santa Cruz River. The cluster consists of 91 prehistoric sites, ranging in time from approximately 5000 B.C. to A.D. 1450, and includes the historic Canoa Ranch itself, first established in 1821, and occupied continuously between 1876

Notes:

- (1) Site numbers begin with "AZ " and end with "ASM" to indicate that they are recorded in Arizona at the Arizona State Museum. These have been dropped from the site numbers for ease in reference.
- (2) Edited contributions by individuals are attributed by their full name; written source materials from publications are attributed by last name of the author(s) and publication date.
- (3) NRHP indicates the property is listed, or contains properties listed, on the National Register of Historic Places.
- (4) Individual Important Archaeological Sites described in Appendix B are noted when contained within site clusters; see text for discussion.

and 1951. Captain Juan Bautista de Anza traversed the property in 1775, on his journey to establish the settlement of San Francisco. A large number of prehistoric sites critical to local and regional prehistory are present within this site cluster. They range from Late Archaic and Early Formative sites bordering the Santa Cruz River, to relatively large, late Classic villages in the vicinity of Madera Wash. Other site types include fieldhouses, agricultural fields, procurement and processing sites, hunting blinds, special-activity areas, and water-control features. This assemblage of archaeological sites represents a physical record of human land use in the upper Santa Cruz River Valley spanning almost 7,000 years. (Huber and West 2003)

CARMEN CLUSTER

A number of large sites are located on both sides of the Santa Cruz River east of the town of Carmen. The largest (DD:8:42) surrounds the Bailey ranch house on the eastern side of the river. It contains multiple mounds (more than seven) over an area 500 m by 300 m, as well as traces of an irrigation canal. A hole dug at the ranch revealed a depth of trash to approximately 5 ft. A similar, although slightly smaller site (DD:8:40), is located between the village of Carmen and the river. Near the Bailey Ranch, at the Dougherty Ranch, is a third large site (DD:8:41), with large mounds and a dense artifact scatter. The ceramic dating of these sites is A.D. 900 to 1350, although the site in the village appears not to be as late as the others. More sites appear on the bluffs on the eastern side of the river (DD:8:35 and DD:8:37) that appear to be coeval with the late occupation of the mound villages. Together, this cluster is the densest prehistoric occupation in the Santa Cruz County part of the valley. (Bill Robinson)

CONTINENTAL, MADERA CLUSTER

This dense cluster of archaeological sites extends from near Sahuarita Road south to just south of the Town of Continental, with the highest density of settlement occurring on the terraces east of the Santa Cruz River. Virtually all flat-topped terrace tops in this area were utilized, with occupation ranging from Middle Archaic to Early Classic period times (6000 B.C. to A.D. 1300). There are no known ballcourts or other types of public architecture at the Hohokam sites in this area and how settlement in this region articulated with settlement in the Tucson area remains to be determined. One of the larger sites in this cluster is the Continental site (EE:1:32), a Classic period Hohokam village dating to A.D. 1150-1450, that was initially recorded in the 1950s. Excavations conducted in advance of development in 1985 and 1986, and again in 1995, uncovered dozens of pithouses, roasting features, fire hearths, and other evidence of intensive occupation. A portion of the Continental site has been dedicated to the Archaeological Conservancy for protection. Nearby development of the Madera Highlands property to the north has also identified numerous Hohokam settlements dating to the Middle Rincon phase (A.D. 1000-1100), suggesting a short but intense use of the bajada slopes in this area, a land use pattern typical of this time period. (Henry Wallace; Jones 1997; Riggs 1998)

COYOTE MOUNTAIN CLUSTER

The Coyote Mountain Archaeological cluster consists of 39 sites situated in the upper bajada/lower mountain environment on the western side of the Altar Valley, approximately 35 miles southwest of Tucson. Settled since Archaic times, the bulk of the prehistoric occupation dates

to the Hohokam Sedentary (A.D. 1100-1150) and Classic periods (A.D. 1150-1450). During Classic times, the Hohokam community represented by these sites appears to have blossomed around a number of large habitation sites with compound walls and platform mounds. Additional sites include non-compound settlements, farmsteads, agricultural fields, rock art sites and special-activity sites. The cluster represents a valuable source of information about the Hohokam settlement of the Altar Valley, a part of eastern Pima County for which information on past human land use is especially inadequate. (Dart et al. 1990)

DAIRY CLUSTER

The Dairy cluster is composed of four principle archaeological sites: Brickyard (AA:12:51), Cortaro Farms (AA:12:232), Valley Farms (AA:12:736), and the Dairy site (AA:12:285). This cluster was continuously occupied from Early Agricultural times (circa 500 B.C.) through late prehistoric times (circa A.D. 1450). Further, it is one of the few localities in southern and central Arizona with a well-documented sequence of houses and other remains dating to the Early Ceramic period (A.D. 350-650). Throughout its occupation, the area was a series of small, farming hamlets based on irrigation and alluvial fan (ak-chin) agriculture. While this site cluster has been significantly damaged by contemporary development, deep burial through alluvial processes has protected a wide array of archaeological features of diverse types and time periods. (Paul Fish)

DAVIDSON CANYON CLUSTER

The Davidson Canyon cluster includes sites recorded as part of a survey of the Cienega Creek area by Michelle Stevens in the mid-1990s (See "Upper and Lower Cienega Cluster"), as well as during the Anamax land exchange on U.S. Forest Service lands in the 1970s and 1980s. The cluster contains multiple archaeological sites representing human use of the upland areas of the eastern Santa Rita Mountains from the Archaic period through the historic era. Settlement tended to focus in proximity to the drainages linking the mountain uplands east to the Cienega Creek, and along Upper Davidson Canyon draining into the Cienega Creek to the north. For thousands of years, people have found the eastern Santa Rita Mountains habitable, and this cluster contains the record of that land use. Sites within the area include those listed on the National Register of Historic Places in 1991, as part of the Upper Davidson Canyon Archaeological District.

The district encompasses 1,300 acres, within which 29 sites are recorded, dating to both the Archaic and later Ceramic periods, with the most intensive occupation associated with Hohokam land use between A.D. 700-1200. Archaic period sites are characterized by scatters of flaked stone artifacts and debris representing short-term specialized activities such as hunting and lithic raw material procurement. The Hohokam sites consist of habitation sites, including short- and long-term settlements, and specialized activity sites used for procurement and processing of wild plants and animals, stone for making tools, and agriculture. A single historic ranch house dating between 1870 and 1920, is also known within the district. In all, this cluster represents a complimentary set of archaeological sites to those recorded along the Cienega Creek and that represent the upland component of human existence in the Cienega Valley. (Michelle Stevens; Seymour and Cameron 1990)

DOWNTOWN TUCSON CLUSTER

Downtown Tucson has been occupied for several thousand years. Prehistoric Hohokam, Protohistoric, Spanish, Mexican, and American Territorial period archaeological features have been encountered within the downtown core, bounded roughly by Speedway Boulevard on the north, Fourth Avenue on the east, 22nd Street on the south, and Interstate 10 on the west. Within this area are the Tucson Presidio, focal point of Spanish Colonial occupation, as well as prehistoric sites relating to the Hohokam people. The features and artifacts found within this area tell much of the unrecorded story of Tucson. These cultural features have been, and continue to be, lost during public and private development. Sites within the Downtown Tucson cluster include the Tucson Presidio site (BB:13:81), Court Street Cemetery (BB:13:156), and National Cemetery (BB:13:325). (Homer Thiel)

EASTERN SIERRITA CLUSTER

During a reconnaissance survey for his Master's thesis work in 1952 and 1953, Paul Frick identified 38 Hohokam archaeological sites on the eastern slope of the Sierrita Mountains. Frick searched only in areas accessible by road. Of the 38 counted sites, 36 are within the site group identified as the Eastern Sierrita site cluster for the Sonoran Desert Conservation Plan and two are north of this group. Eighteen of the sites in the cluster were in the 4- to 5-mi² area surrounding the McGee Ranch, including 10 sherd areas Frick interpreted as inhabitation areas scattered along the foothills north of the ranch, and another 10 habitation areas in the mountains south of the ranch. The cluster sites include: 5 Rillito phase (A.D. 850-950) sites north of the ranch; 5 Rillito-Rincon phase (A.D. 850-1150) sites near the ranch and on the slopes to the north; 12 Rincon phase (A.D. 950-1150) sites scattered throughout the foothills; 1 Rillito-Rincon-Tanque Verde phase (A.D. 850-1300) site at the ranch; and 13 unplaced sites. Frick also notes one occurrence of clustered rock piles and occasional petroglyphs in the Sierrita Mountains, although he does not specify where these features are or whether they were counted among the 38 site total in the Sierritas. The site cluster appears to contain evidence for an extensive Hohokam occupation in this part of the Sierrita Mountains during a limited time period between A.D. 900 and 1150. (Alan Dart)

GUEVAVI RANCH CLUSTER

EE:9:35 and EE:9:112-132—these 22 sites, located on 280 acres along the Santa Cruz River, form a cluster with considerable time depth and good density of artifacts. They date from pre-Classic and Classic prehistoric sites (A.D. 900-1400), to Protohistoric sites (A.D. 1500-1700), to historic Spanish, Mexican, and Anglo sites. Evidence of irrigation—both prehistoric and historic—is present. All sites are considered eligible for inclusion in the National Register of Historic Places under Criterion D. Four sites are also eligible under Criterion A—associated with events that made a significant contribution to broad patterns of our history (that is, the Spanish entrada and the reduction and assimilation of Native Americans), as well as under Criterion B—association with the lives of people (that is, Father Kino). (Bill Robinson; SWCA 1991)

GUNSIGHT MOUNTAIN CLUSTER, NRHP

The Gunsight Mountain cluster is the same as the Gunsight Mountain Archaeological District, which was listed on the National Register of Historic Places in 1991, for its extraordinary potential to yield information about the history and prehistory of the Altar Valley. Located in the northernmost peak of the Sierrita Mountains, the district encompasses some 3,334 acres of private and state trust lands, containing 123 archaeological sites, including an extensive cluster of archaeological sites dating variously from the Archaic period (7500 B.C.-A.D. 200), Early Ceramic through Classic periods (A.D. 200-1450), Protohistoric period (A.D. 1450-1700), and Historic period (A.D. 1700-1950). Site types include intensively inhabited hamlets, other limited habitation sites, and non-habitation sites used for wild resource processing. The district contains many visible cultural features, including bedrock mortars, house mounds, trash features, petroglyphs, historic fences and walls, historic houses, rock rings, prehistoric pithouses and rockshelters. The district is an excellent example of human settlement in an upper piedmont setting in southern Arizona. (Dart 1989)

HONEYBEE CLUSTER

The Honeybee site cluster includes a concentration of archaeological and historic sites that extend from the confluence of Big Wash with the Cañada del Oro drainage up to the Pima County line. There are two very large Hohokam sites in the district, Sleeping Snake (BB:9:104) and Honeybee Village (BB:9:88). A significant portion of the Sleeping Snake site was recently excavated by SWCA, Inc., and its current condition is unknown. Honeybee Village remains largely intact and remarkably well preserved given the level of development in the vicinity.

Other sites along the Honeybee drainage include several smaller habitation areas (such as BB:9:169), in addition to a wide range of resource procurement and processing sites. The resource procurement and processing sites are quite variable in size, but tend to have bedrock mortars (used for grinding wild plant seeds such as mesquite), metate slicks (perhaps also used in food processing), petroglyphs, and cupules (small depressions that look like miniature mortars and are perhaps related, in function, to the use of mortars). Most of these sites have low-density artifact scatters, and there is the potential for buried remains such as roasting pits and pit structures that are not visible on the surface. Isolated bedrock mortars, roasting pits, and metate slicks are also present in the region. The cluster area appears to have been occupied from the Snaketown phase through the Tanque Verde phase in the Tucson Basin Hohokam sequence, between approximately A.D. 700 and 1300, although there is some suggestion of sporadic use of the area during the Archaic period as well. Several historic home sites representing settlements dating to the late nineteenth and early twentieth centuries are also located within this cluster. (Henry Wallace)

LOS MORTEROS CLUSTER

Three principle sites and related occupations comprise the Los Morteros cluster: the Cement Plant (no site number), Huntington Ruin (AA:12:73), and the Los Morteros site (AA:12:57).

This cluster—located at the northern end of the Tucson Mountains, commonly referred to as Point of the Mountains—represents a group of interrelated sites with both historic and prehistoric significance. In this area, the Tucson Mountains form an igneous intrusion into the Santa Cruz River floodplain, forcing water permanently close to the surface. This riparian area supported dense prehistoric and historic populations since at least A.D. 700. A ballcourt and large central plaza at Los Morteros served as a religious and political focal point for a dispersed farming community along the Santa Cruz River between A.D. 900 and, perhaps, A.D. 1150. After 1150, this locality ceases to play a central role in community organization and is incorporated into the Marana Community. The village Kino refers to as El Valle de Correa is in the vicinity of these sites, but the exact location has not been verified archaeologically. (Paul Fish)

LOS ROBLES CLUSTER, NRHP

The Los Robles cluster includes most of the Los Robles Archaeological District. The district was created in 1989, to preserve and provide recognition to the high archaeological values associated with a dense concentration of Hohokam sites located along the western edge of Los Robles Wash. These sites date between approximately A.D. 1050 and A.D. 1450. During this time, Hohokam society underwent radical change, resulting in the emergence of new forms of social control centered on communities with a kind of public architecture referred to as platform mounds. The district contains a total of 129 archaeological sites within an area encompassing 12,894 acres of state and Bureau of Land Management land. The Pig Farm site (AA:11:12) was originally intended to be included within the district, although due to landowner objections at the time it was not included. This site is a ballcourt village dating to the Hohokam pre-Classic period (A.D. 750-1150), although it also has a late Classic period component (A.D. 1300-1450). The Pig Farm site is one of the largest Hohokam village sites in the Tucson Basin and it is thought to be an ancestral settlement to the later occupations further north along Los Robles Wash. (John Madsen; Downum 1986)

MARANA MOUND CLUSTER

Stretching across the Tortolita Mountain bajada to the Santa Cruz River and the northern end of the Tucson Mountains, the Hohokam Marana Mound Community encompasses 99 archaeological sites and approximately 56 mi². Dating between A.D. 1150 and 1300, it represents the height of population and organizational clustering in a major, relatively undisturbed segment of the northern Tucson Basin. Community sites include a range of functionally and topographically differentiated locations, including a central town with a platform mound and walled residential compounds (the Marana Mound site, AA:12:251), three additional large villages with compounds, residential locations without compounds, trincheras or hillside terraced sites with both residential and agricultural terraces, large communal agricultural fields, small agricultural fields, and a variety of specialized activity sites. The final community configuration, emerging from nearly 2,000 years of settlement history for desert cultivation, is a relatively short-lived phenomenon of less than two centuries. (Paul Fish)

MIDDLE SANTA CRUZ CLUSTER

This site cluster is a concentration of 18 investigated Late Archaic/Early Agricultural period sites along the Santa Cruz River, between the northern end of the Tucson Mountains and Martinez Hill (San Xavier). Sites in the Middle Santa Cruz cluster include: Clearwater (BB:13:6), Costello-King (AA:12:503), Las Capas (AA:12:111), Julian Wash (BB:13:17), Los Pozos (AA:12:91), Roland (AA:12:86), Santa Cruz Bend (AA:12:746), Stone Pipe (BB:13:425), Valencia (BB:13:15), and Valencia Vieja (BB:13:74). Surface collections, test trenches, and/or excavations have been conducted at all of the sites. Radiocarbon dates indicate they range in age from about 4,000 to 2,000 years ago. The cluster includes sites buried in the floodplain and in alluvial fans adjacent to the floodplain. Therefore, site preservation is relatively good, although portions of most sites have been impacted by farming, gravel and clay mining, highway construction, and urban development. Site types include settlements, cemeteries, agricultural fields, canal systems, and resource processing stations. These sites form a cluster, because they were occupied during the same interval (and some at the same time), and their inhabitants were likely linked by kinship, culture, and trade. The cluster is significant because investigations at these sites have discovered the earliest pithouses, storage pits, and terraces in Arizona, and the earliest corn, beans, pottery, canals, and cemeteries in the southwestern United States. This site cluster is a relatively well-preserved, representative sample of the riverine settlements of the early farming culture of southeastern Arizona. (Jonathan Mabry)

REDINGTON CLUSTER

This cluster is focused on three large Hohokam village sites and associated occupations, each of which represents prehistoric communities that developed along the San Pedro River during prehistoric times. The sites are Second Canyon Ruin (BB:11:12, BB:12:20), Bayless Ruin/Redington Ruin (BB:11:2, BB:11:1), and Reeve Ruin/Davis Ruin (BB:13:70, BB:13:20). Second Canyon is located on the western terrace overlooking the San Pedro, north of Redington and opposite Bollen Wash. The site was occupied from early in the Hohokam sequence, starting about A.D. 700, until approximately A.D. 1300, and contains an early Classic period platform mound and an associated compound enclosure. The compound, BB:11:20, was occupied by northern Puebloan migrants to the San Pedro Valley, indicating population movement into the San Pedro River from the north late in prehistory. Bayless/Redington is located near the modern town of Redington on terraces lining the eastern side of the San Pedro River. This very large site group contains a ballcourt at Redington and a small platform mound at Bayless, suggesting Redington was a primary village in pre-Classic times and that Bayless was its Classic period successor. Bayless/Redington also appears to have marked a social boundary between the upper and lower portions of the San Pedro River in prehistoric times, the nature of which is still unknown. The Reeve/Davis site group represents two Classic period occupations between A.D. 1200 and A.D. 1450, situated on opposite terraces overlooking the San Pedro, just south of Redington. A subterranean kiva of Western Anasazi design on the Davis site indicates it was also occupied by Puebloan migrants from the Four Corners area in northeastern Arizona during the Classic period. Smaller settlements, fields systems, and special-activity sites are associated with each of these three main village groups. Together,

these sites represent only a small portion of a highly intensive occupation of the San Pedro River by the Hohokam. (Jeff Clark)

RINCON CREEK CLUSTER

The Rincon site cluster includes numerous archaeological sites that follow the northern side of Rincon Creek in the eastern Tucson Basin. The cluster includes both private land, as well as land included in Saguaro National Park, Rincon District, and extends from the western park boundary to just east of Sentinel Butte. Within this area are large Hohokam village sites with associated agricultural areas, smaller settlements, and special-activity sites related to resource procurement and processing – all associated with prehistoric communities that once existed in the area. Three major sites and a host of smaller sites are ones downstream and to the west, focused on the springs along the bedrock of Tanque Verde Ridge and the mouth of Box Canyon. The three habitation sites probably span the period from at least A.D. 675 to 1300, and may extend earlier. The Box Canyon (BB:14:2) and Freeman (BB:14:3) sites at the mouth of Box Canyon are dense habitation areas that are probably one village spread over two ridges. The Tanque Verde Ruin (BB:14:24) was a Tanque Verde phase (A.D. 1150-1300) compound in this district, which has been completely destroyed by commercial pothunting. BB:14:60 is another large, long-term habitation site in this area. Also present are a number of petroglyph sites, including a large site at the end of Tanque Verde Ridge just within Saguaro National Park.

Further east, in the upper Rincon Valley are more large Hohokam village sites, including the Loma Alta site (BB:14:10), a Tanque Verde phase site occupied between A.D. 1150 and 1300. The cluster includes both mountain edge zone and creek edge concentrations of occupation and use. It stands out as the largest such concentration of settlements on the eastern side of the Tucson Basin. The eastern portion of the cluster south of the park boundary is within the limits of the Rocking K Ranch subdivision development. (Henry Wallace; Wellman and Lascaux 1999)

RINCON MOUNTAINS CLUSTER, NRHP

The Rincon Mountains cluster is the same name given to the Rincon Mountain Foothills Archaeological District listed on the National Register of Historic Places in 1977. Originally containing 110 sites, the site count has been increased to approximately 280 as a result of recent surveys conducted by the National Park Service. Located below the 4,000-foot elevation contour in the Rincon Mountains portion of Saguaro National Park, this district includes large and small village sites, work camps, rockshelters, rock art panels, quarries, and historical lime kiln sites. Prehistoric occupation at the headwaters of Rincon Creek and south of Tanque Verde Wash spans the Archaic through Hohokam Classic period, with agricultural clusters dating to the Rincon and Tanque Verde phases (A.D. 950-1300). The archaeological sites contained within the district represent a physical record of thousands of years of human land use in both lowland and upland settings in the eastern Tucson Basin. (Sue Wells)

RIO RICO CLUSTER

DD:12:25-32 and EE:9:69-84 are 26 sites in this group that lie in the vicinity of the confluence of the Santa Cruz River and Sonoita Creek and share a common pattern. They are all located

on the first terrace above drainages favorable for agriculture; they consist of foundations of single circular structures placed in a row along the edge of the terrace; and they all have a ceramic scatter consisting of dominant plain ware with occasional red ware. Although many of the sites may have been impacted by housing developments and infrastructures such as roads, pipe and power lines, and land leveling, at least one-third lie in the Sonoita Creek Natural Resource Area (Arizona State Parks), which remains much as it was when the sites were first noted in 1972. The common pattern of these sites is reminiscent of sites identified with the Protohistoric Sobaipuri (A.D. 1450-1700) in the San Pedro Valley. If this relationship is confirmed, the Rio Rico cluster will provide an incredibly rich resource for understanding this time period in the Santa Cruz Valley. (Bill Robinson)

RIVER CONFLUENCE CLUSTER

This is the most densely settled site cluster included in the Pima County plan. Extending from Grant Road and Interstate 10 north to the southern margin of the Dairy site cluster, and including the cluster of sites around Hodges (AA:12:18) on the eastern side of the river, and the sites on the terraces of the Santa Cruz on both sides, this cluster is focused on the confluence of the three largest drainages in the Tucson Basin—the Santa Cruz River and its two largest tributaries, the Cañada del Oro Wash and Rillito River. Some sites here include Bojórquez-Aguirre Ranch (AA:12:122), Rabid Ruin (AA:12:46), and Yuma Wash (AA:12:311). Permanent water and large amounts of arable land concentrated settlement in this area from at least Middle Archaic times up to the terminus of the Tucson phase in the A.D. 1300s or 1400s. The cluster includes the most famous site in the Tucson Basin, Hodges, where the earliest large-scale excavations were conducted in the 1930s, by Isabell Kelly, under the auspices of Gila Pueblo. Ballcourts were present at Hodges, and there was probably at least one platform mound compound at Furrey's Ranch (AA:12:31/32) nearby. Although most of the area around Hodges and Furrey's Ranch has been developed, small portions of these areas remain undeveloped in lots and backyards and are intact beneath foundations and trailers. Located in a critical centerpoint for trade and communication in the Tucson area, this site cluster is extremely important for what it can tell us about the structure and economics of prehistoric settlement in the region, and even though large portions have been destroyed, even small remnants offer vital information. Support for integrity of this district is seen in the spatial clustering of sites and the nearly continuous surface scatter of artifacts present prior to modern impacts, based on the work of Ellsworth Huntington and personal field reconnaissance in the 1970s. (Henry Wallace)

SAN RAFAEL VALLEY CLUSTER

The Santa Cruz River flows south from its headwaters before crossing into Mexico. The last mile or so has a perennial flow fed by springs in unique high altitude grassland. Recent and intensive survey of the cultural resources located 127 prehistoric and historic sites. Although 31 sites consist exclusively of lithic debitage, the diagnostics indicate a range in time from late Archaic (circa 3500-1500 B.C.), through the Ceramic period, for these resource exploitation sites. The remainder of the sites exhibit both lithics and ceramics. Many date to A.D. 1-1200, based on plain, red, and red-on-brown ceramics; however, seven sites with mounds, plazas, and compound walls have the presence of both Canelo Black-on-yellow and Santa Cruz Polychrome, which extends the occupation into the Classic period (A.D. 1299-1450). These late sites may be associated with the site of La Zorilla, a large regional center lying just across

the border in Mexico. The entire cluster offers opportunities to study the development of a regional system located in a grassland ecotone. (Bill Robinson; MacWilliams 2001; Ruble 1999)

SANTA RITA CLUSTER

The findings of an archaeological survey conducted by a student from Texas Tech University in the late 1980s are the basis of the Santa Rita site cluster. Cynthia Buttery investigated the Santa Rita Experimental Range to examine the relationship between prehistoric site location and environmental factors, because so little was known at the time about how prehistoric people utilized land in areas removed from the primary drainages in the region. Her work revealed that the Hohokam used the area to cultivate crops and to procure and process wild plants from the Colonial period to the early Classic period, between approximately A.D. 500 and 1300, with the heaviest use during the middle to late Rincon phase (A.D. 1000-1150). Sites found on the lower bajada consist of lithic scatters, garden sites, limited-activity sites, and five habitations. Later in time, the focus of habitation shifts to the upper bajada areas and includes settlements with or without rock compounds and trash mounds. In both locales, there is evidence of repeated occupation and reuse of the land over long periods of time. The cluster is important as a source of information about Hohokam adaptations to non-riverine upland settings in the eastern Tucson Basin. (Buttery 1987)

TANQUE VERDE CREEK CLUSTER

The area along the south side of Tanque Verde Creek comprises a large, but inadequately understood site cluster. Dating from at least as early as A.D. 300, and occupied until the A.D. 1200s, there is likely to be extensive settlement along this stretch of Tanque Verde Creek that has not been documented due to a lack of survey coverage and recent development in the area. The site cluster is of particular interest due to the ceramics that occur there originating from the San Pedro Valley, perhaps from contact across Redington Pass. Sites included in the Tanque Verde Creek cluster include: 49er's (BB:14:17), Bosque (BB:14:22), Emkay (BB:13:123), Houghton Road (BB:13:398), Tanque Verde Wash (BB:14:68), and University Ruin (BB:9:33). The sites in this district would certainly have been related to one another due to spatial proximity and due to the logical routes of travel that would have moved along Tanque Verde Creek through the cluster. Linked to the settlements along the Tanque Verde Creek are sites in the upland reaches of the nearby Rincon Mountains. This area, now partially within Saguaro National Park, contains Late Archaic sites and Hohokam villages and farmsteads that cluster along two tributaries of, and on the first terraces above, Tanque Verde Wash. The Hohokam occupation dates primarily to the Rillito and Rincon phases between A.D. 850-1150. (Henry Wallace; Sue Wells)

TUCSON MOUNTAIN CLUSTER

This cluster is defined in two non-contiguous areas containing 26 rock art sites recorded in the Tucson Mountain District of Saguaro National Park. These are identified as Tucson Mountain A and B. Most of the rock art conforms to the Hohokam style and were created over centuries of time from the Pioneer through the Classic periods (A.D. 650-1450). Anthropomorphs, zoomorphs, and geometric designs are common. Signal Hill, with more

than 1,000 elements, is the only site open to the public, with a developed trail and interpretive signs. The distinctive spiral design near the summit has appeared in *National Geographic*, a firefighter's calendar, and numerous southwestern pictorial calendars. Sites have names that relate to topographic features such as Signal Hill (AA:12:63), or to distinctive rock art elements, such as the Checkerboard (AA:12:797) site. Rock art occurs on several different types of geological formations. Rock art sites in the park usually occur in isolation, although a few sites have bedrock mortars, rock features, or artifact scatters in association. This part of the park has little evidence of permanent habitation sites, suggesting the rock art sites, like the other prehistoric sites in the park, were special-use sites. (Sue Wells)

UPPER AND LOWER CIENEGA CREEK CLUSTER

This cluster is defined in two non-contiguous areas along Cienega Creek in eastern Pima County. Many hundreds of archaeological sites have been recorded in the Cienega Creek Valley and its vicinity, representing over 10,000 years of human occupation. The northern and southern portions of Cienega Creek were surveyed in the mid-1990s, by the Center for Desert Archaeology in a volunteer project directed by Michelle Stevens for her doctoral dissertation. Based on radiocarbon determinations from excavated contexts and the character of surface artifacts and features, hundreds of sites were recorded dating to the Archaic (8500-1200 B.C.), Early Agricultural (1200 B.C.-A.D. 150), Ceramic (A.D. 150-1450), Protohistoric (A.D. 1450-1700), and Historic (A.D. 1700-1950) periods. Some sites are multicomponent, with materials from more than one of the periods mentioned. Others sites were not associated with temporally diagnostic surface artifacts or features and may date to either prehistoric or historic periods.

Although no Paleoindian sites (10,000-8000 B.C.) have yet been identified within Cienega Valley, Paleoindian use of the area is suggested by the presence of at least one isolated Clovis point discovered on the eastern edge of the Santa Rita Mountains. Dozens of Archaic sites have been recorded in Cienega Valley. More than 25 of these sites appear to date to the Early and Middle Archaic periods. Because relatively few sites have been identified from these periods in southern Arizona, these sites contribute significantly to current understanding of the Early and Middle Archaic group(s) occupying southern Arizona. The more than 45 Late Archaic and Early Agricultural period sites in Cienega Valley provide valuable information about the adoption of agriculture in the Southwest and the social and economic changes that occurred with the use of cultigens. Numerous Hohokam sites have been recorded in the Cienega Valley, dating to all periods of the Hohokam sequence in the Tucson Basin, from approximately A.D. 650-1450, indicating continuous and intensive use of the creek over centuries of time. Several rare Protohistoric sites associated with the Sobaipuri and Apache cultures have also been identified in Cienega Valley, along with a great number of historic-period sites associated with ranching, mining, and transportation activities. Most of these sites date from the middle to late 1800s and early 1900s. Sites include: Cienega State Station (BB:14:498), Pantano Townsite (EE:2:50), and Marsh Station Road (EE:2:44) in the lower Cienega Creek, and Donaldson (EE:2:30) in the upper Cienega Creek. The archaeological sites contained within the upper and lower Cienega Creek clusters represent a significant record of human adaptation over thousands of years. Much of the land is in public ownership, and many of the sites recorded are in excellent condition, making these two clusters exceptional outdoor laboratories for the study of human history and culture. (Michelle Stevens)

UPPER SUTHERLAND WASH CLUSTER, NRHP

Extending from the northern limits of Catalina State Park north to the point where Sutherland Wash runs into the pediment of the Catalina Mountains, this district includes a range of habitation and special-function sites, many of which have yet to be recorded in the Arizona State Museum files. The Sutherland Wash site (BB:9:223), with at least two compound enclosures dating to the Hohokam Classic period (A.D. 1150-1450), covers much of the relatively level ground at the northern end of the district, with small, probably related sites extending downstream. At the canyon mouth, with the most permanent water, the largest petroglyph site in the region occurs. Also within this cluster is the Sutherland Wash Archaeological District—contained largely within Catalina State Park that includes 38 sites representing the remains of an entire prehistoric community occupied by the Hohokam between approximately A.D. 550 and 1450. The settlement centered on a main village, Romero Ruin (BB:9:1), that was surrounded by 13 smaller hamlets, 16 activity areas, 6 temporary houses, and several very large agricultural fields. Romero Ruin also contains the remains of the nineteenth century ranch house owned by Francisco Romero, who built his home within the ancient walls of the old Hohokam village site. Settlement in the cluster range from at least Early Agricultural times to the Tanque Verde phase (1200 B.C. to A.D. 1300). The use of the area is clearly tied to the springs and permanent water in the drainage system. (Henry Wallace; Pima County 2002)

VALENCIA CLUSTER

The Valencia archaeological site cluster includes several Hohokam village localities and a string of related small sites along the eastern bank of the Santa Cruz River, all of which were probably linked by a single canal system. Included are all sites in the reach of the river between the northern end of the San Xavier District of the Tohono O'odham reservation and Irvington Road on the eastern side of the river. Best known among this site cluster are Valencia Vieja (BB:13:15), a large Tortolita phase (A.D. 450-650) village with over 300 houses and a central plaza, and the Valencia site (BB:13:74), with its large ballcourt and two plazas and related mounds dating from A.D. 700 to 1200. (Henry Wallace)

WEST BRANCH CLUSTER

This site cluster contains the remains of at least three Hohokam villages that slightly overlap each other in age. They are located along the western branch of the Santa Cruz River, south of its confluence with the Santa Cruz. The first known settlement in the cluster, the Dakota Wash site (AA:16:49), was settled by about A.D. 450. By A.D. 900, Dakota Wash had grown to a sizeable village with a ballcourt and plaza. By A.D. 950, it was largely abandoned, and settlement shifted northward to the West Branch site (AA:16:3), one of the largest villages in the Tucson area. Dating to between A.D. 950 and 1150, this village covered a large area between the Tucson Mountains and the Santa Cruz River floodplain. The site is well known to archaeologists as one of a cluster of settlements devoted to the production of pottery that was distributed throughout the Tucson area. By A.D. 1150, occupation again shifted, and the West Branch site was abandoned. Some of the residents may have moved to one of several other sites, the largest of which was the Salida del Sol site (AA:16:44). These settlements, and others to the south, probably relied on a single canal system originating near San Xavier. Some of this site cluster is thought to be buried under Midvale Park in the floodplain, and it is expected

that a pre-A.D. 450 occupation may be still present there. Large portions of the West Branch site have been developed in recent years. Even so, the district retains vital information about Hohokam adaptation in the Tucson Basin. (Henry Wallace)

WILD BURRO CANYON CLUSTER

AA:12:81, :83, :84, :170, :504, and :505 is a cluster of significant archaeological sites, including habitation, resource procurement, and petroglyph components. The cluster is present within, and around, the mouth of Wild Burro Canyon in the Tortolita Mountains. Dated artifacts from the sites indicate a range from about 600 B.C., to approximately A.D. 1200, with the majority of habitation remains appearing to be at the inadequately understood early end of the sequence. The presence of known subsurface pithouses and trash middens at two of the sites – in addition to the largest concentration of rock art in the Tortolita Mountains – indicate the significance of resources in this area. Rock art at one of the sites includes designs in both the Western Archaic and Hohokam styles. (Henry Wallace)

ZANARDELLI CLUSTER

The Zanardelli cluster is a large, Hohokam Classic period community in the southern Tucson Basin. It may have been focused on a platform mound on, or adjacent to, the Santa Cruz River floodplain, and it includes extensive agricultural features on terraces overlooking the river. The site cluster is estimated to cover an area approximately 5 miles long and almost 3 miles wide, and continues upslope to the east. The main occupation began around A.D. 1100, and continued until the end of the Hohokam occupation in the Tucson Basin about A.D. 1450. Previous excavations have uncovered multiple rooms and trash features in the main site area (BB:13:1 and :12), and intensive survey identified dozens of agricultural features (BB:12:315) – over 100 acres in size, consisting of rock piles, linear borders, and terraces built by Hohokam farmers. While much of the site has been impacted by construction of Highway 89, Old Nogales Highway, the UPSP railroad line, and nearby residential areas, the site cluster retains significant research potential into late prehistoric residential and agricultural practices. (Al Dart; Doelle and Wallace 1985)

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Appendix D

MAIN PARTICIPANTS IN THE WORKING GROUP

(in alphabetical order)

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Santa Cruz Tourism Council
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WestWordVision
Patagonia

Tony Sedgwick
President
Sedgwick Management

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Photographer/Landowner

Victoria Sikora
Board Member
Tubac Historical Society and Los
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Brent Sinclair
Community Development Director
Town of Oro Valley

Wendy Stover
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Hacienda Corona de Guevavi

Rick Vaughan
Vice President of Sales and Marketing
Metropolitan Tucson Convention and
Visitors Bureau

Nan Walden
Vice President
Farmers Investment Company

Appendix E
**LOCAL SUPPORT FOR A
SANTA CRUZ VALLEY NATIONAL HERITAGE AREA**

State Officials:

*Governor Janet Napolitano, July 6, 2004
Margie Emmermann, Director of the Arizona Office of Tourism*

Local Governments and Tribes:

*Pima County Board of Supervisors, Resolution No. 2003-88, May 13, 2003
Santa Cruz County Board of Supervisors, Resolution No. 2003-18, May 27, 2003
City of Nogales, Resolution No. R2003-05-007, June 4, 2003
Town of Sahuarita, Resolution 2003-57, September 8, 2003
Town of Oro Valley, Resolution No. (R)03-81, September 17, 2003
Town of Marana, Resolution No. 2003-133, October 27, 2003
Town of Patagonia, Resolution No. 03-21, November 12, 2003
City of Tucson, Resolution No. 19726, November 24, 2003
Pima Association of Governments Regional Council, December 17, 2003
City of South Tucson, Resolution No. 04-39, October 18, 2004
Dallas Massey, Tribal Chairman, White Mountain Apache Tribe, August 10, 2004
San Xavier District Council, Tohono O'odham Nation, September 21, 2004
Vivian Juan -Saunders, Chairwoman, Tohono O'odham National, November 30, 2004
Herminia Frias, Chairwoman, Pascua Yaqui Tribe, February 2, 2005*

Federal and State Land and Park Managers:

*Ann Raser, Superintendent, Tumacacori National Historical Park
Joe Martinez, Acting Manager, Tubac Presidio State Historic Park
Shela McFarlin, Bureau of Land Management, Tucson Field Office
John McGee, Forest Supervisor, Coronado National Forest
Neil Donkersley, Park Manager, Catalina State Park
Sarah Craighead, Superintendent, Saguaro National Park*

Agencies and Organizations Promoting Tourism and Regional Economic Growth:

*Arizona Office of Tourism
Metropolitan Tucson Convention and Visitors Bureau
Nogales-Santa Cruz County Chamber of Commerce
Patagonia Area Business Association
Santa Cruz Tourism Council
Southern Arizona Homebuilders Association
Tubac Chamber of Commerce
Tucson Airport Authority
Tucson Hispanic Chamber of Commerce
Tucson Metropolitan Chamber of Commerce*

Groups and Nonprofits Involved in Historic Preservation, Nature Conservation, and Environmental Education:

*Anza Trail Coalition of Arizona
Arizona Archaeological and Historical Society
Arizona Archaeological Council*

Arizona Historical Society
Arizona-Sonora Desert Museum
Arizona State Museum
Center for Desert Archaeology
Dragoon Mountains Spanish Barbs
Empire Ranch Foundation
Friends of the Santa Cruz River
Menlo Park Neighborhood Association
Pimería Alta Historical Society
Santa Cruz River Alliance
The Nature Conservancy in Arizona
Tucson Audubon Society
Tubac Center for the Arts
Tubac Historical Society
Tucson-Pima County Historical Commission
Tucson Presidio Trust for Historic Preservation
University of Arizona Preservation Studies Program
University of Arizona Southwest Center
WestWordVision, Patagonia

Ranch and Farm Businesses:

J. Anthony Sedgwick, Santa Fe Ranch, Santa Cruz County
David Parsons, Lazy RR Ranch, Santa Cruz County
Mac Donaldson, Empire Ranch, Pima County
Dick and Nan Walden, Farmers Investment Company, Pima County and Rancho Soñado, Santa Cruz County

National Heritage Area Act (Introduced in House)

109th CONGRESS

2nd Session

H. R. _____

To establish the Santa Cruz Valley National Heritage Area in the State of Arizona, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Date: _____

Mr. _____ of Arizona introduced the following bill; which was referred to the Committee on Resources

A BILL

To establish the Santa Cruz Valley National Heritage Area in the State of Arizona, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the `Santa Cruz Valley National Heritage Area Act'.

SEC. 2. CONGRESSIONAL FINDINGS.

The Congress finds that--

- (1) the Santa Cruz River Valley of southern Arizona shares a border with Mexico and encompasses a mosaic of cultures and borderland histories that includes multiple American Indian tribes, whose heritage reaches back some 13,000 years, and the descendants of Spanish, Mexican and American Territorial settlers, who shaped the region, its land, customs, and traditions from the 1690s to the present day;
- (2) the Santa Cruz Valley expresses a combination of cultures, border history, cultural diversity, languages, traditions, folk arts, customs, architecture, and traditional land uses that makes this watershed a unique and distinctive landscape in the United States;
- (3) the area contains the Santa Cruz River and numerous diverse and spectacular natural, scenic, cultural, and recreational resources, including the designated national treasures of Saguaro National Park, Tumacacori National Historical Park, the Juan Bautista de Anza National Historic Trail, Las Cienegas National Conservation Area, the San Xavier Mission, Guevavi, and Calabazas National Historic Landmarks, the Desert Laboratory National Historic Landmark, the Titan Missile Silo National Historic

Landmark, the Patagonia-Sonoita Creek and Canelo Hills Cienega National Natural Landmarks, and the Pennington and Binghampton National Rural Historic Landscapes.

(4) there is broad support expressed as resolutions, letters, and in public meetings from all local governments, tribes and state parks, and many local planning and community groups, chambers of commerce, business associations, ranching and agricultural interests, private property owners, and other interested individuals to establish a National Heritage Area to coordinate and to assist in the preservation, interpretation, and enjoyment of these resources;

(5) in 1991, the National Park Service study *Alternative Concepts for Commemorating Spanish Colonization* identified several alternatives consistent with the establishment of a National Heritage Area, including conducting a comprehensive archaeological and historical research program, coordinating a comprehensive interpretation program, and interpreting a cultural heritage scene; and

(6) establishment of a National Heritage Area in southern Arizona would assist local communities, residents, and property owners in preserving these unique and nationally distinctive cultural, historical, and natural resources.

SEC. 3. DEFINITIONS.

As used in this Act--

(1) the term `heritage area' means the Santa Cruz Valley National Heritage Area; and

(2) the term `Secretary' means the Secretary of the Interior.

(3) the `management entity` means the Santa Cruz Valley Heritage Alliance, Inc.

SEC. 4. SANTA CRUZ VALLEY NATIONAL HERITAGE AREA.

(a) ESTABLISHMENT- There is hereby established the Santa Cruz Valley National Heritage Area in the State of Arizona.

(b) BOUNDARIES- The heritage area shall include the Santa Cruz River Valley natural watershed within portions of the counties of Santa Cruz and Pima, as identified on the map, entitled "Santa Cruz Valley National Heritage Area," numbered _____ and dated _____.

(c) MANAGEMENT ENTITY-

(1) The Santa Cruz Valley Heritage Alliance, Inc., a private, non-profit 501(c)3 corporation chartered in the State of Arizona, shall serve as the management entity for the heritage area.

(2) The Board of Directors of the management entity will include a representative of the National Park Service (the Superintendent of Tumacácori National Historical Park, serving in an ex-officio role as the local partner of the National Heritage Area), a representative of the State of Arizona (appointed by the Arizona State Parks department), representatives of both counties (appointed by the county Boards of Supervisors), and a set of at-large members that equitably represents the residents and various stakeholder groups of the counties of Pima and Santa Cruz. The Board of Directors will be responsible for planning, fundraising, staff hiring, and final selection of projects and programs that will be supported by the National Heritage Area.

(3) The Board of Directors of the management entity will be advised and assisted by a Partnership Council that will represent a broad range of local interests, such as

municipalities, Native American tribes, ranching, agriculture, historic preservation, nature conservation, culture/arts, education, parks, outdoor recreation, tourism/economic development, lodging, restaurants, transportation, private landowners, and others. Representatives of local units of the National Park Service, the National Forest Service, and the Bureau of Land Management will serve in non-voting, advisory roles. The Partnership Council will review and recommend projects and programs for funding and other assistance from the National Heritage Area, and will identify potential partnerships between the National Heritage Area and government agencies, nonprofits, and other local stakeholders to help achieve long-term goals

SEC. 5. AUTHORITY AND DUTIES OF THE MANAGEMENT ENTITY.

(a) MANAGEMENT PLAN-

(1) No later than 3 years after the date of enactment of this Act, the management entity shall develop and forward to the Secretary a management plan for the heritage area.

(2) The management entity shall develop and implement the management plan in cooperation with affected communities, tribal and local governments and shall provide for public involvement in the development and implementation of the management plan.

(3) The management plan shall, at a minimum--

(A) provide recommendations for the conservation, funding, management, and development of the resources of the heritage area;

(B) identify sources of funding.

(C) include an inventory of the cultural, historical, archaeological, natural, and recreational resources of the heritage area;

(D) provide recommendations for educational and interpretive programs to inform the public about the resources of the heritage area; and

(E) include an analysis of ways in which local, State, Federal, and tribal programs may best be coordinated to promote the purposes of this Act.

(4) If the management entity fails to submit a management plan to the secretary as provided in paragraph (1), the heritage area shall no longer be eligible to receive Federal funding under this Act until such time as a plan is submitted to the Secretary.

(5) The Secretary shall approve or disapprove the management plan within 90 days after the date of submission. If the Secretary disapproves the management plan, the Secretary shall advise the management entity in writing of the reasons therefore and shall make recommendations for revisions to the plan.

(6) The management entity shall periodically review the management plan and submit to the Secretary any recommendations for proposed revisions to the management plan.

Any major revisions to the management plan must be approved by the Secretary.

(b) **AUTHORITY-** The management entity may make grants and provide technical assistance to tribal and local governments, and other public and private entities to carry out the management plan.

(c) **DUTIES-** The management entity shall--

(1) give priority in implementing actions set forth in the management plan;

(2) coordinate with tribal and local governments to better enable them to adopt policies consistent with the goals of the management plan;

(3) encourage by appropriate means economic viability in the heritage area consistent with the goals of the management plan; and

(4) assist local and tribal governments, non-profit organizations, and private land-owners in--

(A) establishing and maintaining interpretive exhibits in the heritage area;

(B) developing outdoor recreational resources in the heritage area;

(C) increasing public awareness of, and appreciation for, the natural, cultural, historical, archaeological, scenic, and outdoor recreational resources and sites in the heritage area;

(D) the preservation and rehabilitation of historic structures, archaeological sites, and natural resources related to the heritage area;

(E) promoting cultural, traditional, and nature-themed events and attractions in the heritage area; and

(F) carrying out other actions that the management entity determines appropriate to fulfill the purposes of this Act, consistent with the management plan.

(d) **PROHIBITION ON ACQUIRING REAL PROPERTY-** The management entity may not use Federal funds received under this Act to acquire real property or an interest in real property.

(e) **PUBLIC MEETINGS-** The management entity shall hold public meetings at least annually regarding the implementation of the management plan.

(f) **ANNUAL REPORTS AND AUDITS-**

(1) For any year in which the management entity receives Federal funds under this Act, the management entity shall submit an annual report to the Secretary setting forth accomplishments, expenses and income, and each entity to which any grant was made by the management entity.

(2) The management entity shall make available to the Secretary for audit all records relating to the expenditure of Federal funds and any matching funds. The management entity shall also require, for all agreements authorizing expenditure of Federal funds by other organizations, that the receiving organization make available to the Secretary for audit all records concerning the expenditure of those funds.

SEC. 6. DUTIES OF THE SECRETARY.

(a) **TECHNICAL AND FINANCIAL ASSISTANCE-** The Secretary may, upon request of the management entity, provide technical and financial assistance to develop and implement the management plan.

(b) **PRIORITY-** In providing assistance under subsection (a), the Secretary shall give priority to actions that facilitate--

(1) the conservation and promotion of the significant natural, cultural, historical, archaeological, scenic, and outdoor recreational resources of the heritage area; and

(2) the provision of educational, interpretive, and recreational opportunities consistent with the resources and associated values of the heritage area.

SEC. 7. PRIVATE PROPERTY PROTECTION.

(a) **ACCESS TO PRIVATE PROPERTY** - Nothing in this Act shall be construed to require any private property owner to permit public access (including Federal, State, or local government access) to such private property. Nothing in this Act shall be construed to modify any provision of Federal, State, or local law with regard to public access to or use of private lands.

(b) **LIABILITY** - Designation of the Heritage Area shall not be considered to create any liability, or to have any effect on any liability under any other law, of any private property owner with respect to any persons injured on such private property.

(c) **RECOGNITION OF AUTHORITY TO CONTROL LAND USE** - Nothing in this Act shall be construed to modify, enlarge, or diminish any authority of Federal, State, tribal, or local governments to regulate land use.

(d) **TRUST RESPONSIBILITIES**- Nothing in this Act shall diminish the Federal Government's trust responsibilities or government-to-government obligations to any federally recognized Indian tribe.

(e) **TRIBAL LANDS**- Nothing in this Act shall restrict or limit a tribe from protecting cultural or religious sites on tribal lands.

(f) **PARTICIPATION OF PRIVATE PROPERTY OWNERS IN HERITAGE AREA** - Nothing in this Act shall be construed to require the owner of any private property located within the boundaries of the Heritage Area to participate in or be associated with the Heritage Area.

(g) **EFFECT OF ESTABLISHMENT**- The boundaries designated for the Heritage Area represent the area within which Federal funds appropriated for the purpose of this Act shall be expended. The establishment of the Heritage Area and its boundaries shall not be construed to provide any non-existing regulatory authority on land use within the Heritage Area or its viewshed by the Secretary or the management entity.

(h) **NOTIFICATION AND CONSENT OF PROPERTY OWNERS REQUIRED** - No privately owned property shall be preserved, conserved, or promoted by the management plan for the Heritage Area until the owner of that private property has been notified in writing by the management entity and has given written consent for such preservation, conservation, or promotion to the management entity.

(i) **LANDOWNER WITHDRAWAL** - Any owner of private property located within the boundary of the Heritage Area shall have their property immediately removed from inclusion in the Heritage Area by submitting a written request to the management entity.

SEC. 8. SUNSET.

The authority of the Secretary to provide assistance under this Act terminates on the date that is 15 years after the date of enactment of this Act.

SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

(a) **IN GENERAL-** There are authorized to be appropriated to carry out this Act \$10,000,000, of which not more than \$1,000,000 may be authorized to be appropriated for any fiscal year.

(b) **COST-SHARING REQUIREMENT-** The Federal share of the total cost of any activity assisted under this Act shall be not more than 50 percent.